

OPNAVINST 11010.20F  
N44  
7 June 1996

OPNAV INSTRUCTION 11010.20F

From: Chief of Naval Operations  
Subj: FACILITIES PROJECTS MANUAL  
Ref: (a) SECNAVINST 11010.5F (NOTAL)  
(b) OPNAVINST 11010.23E (NOTAL)  
Encl: (1) Facilities Projects Manual

1. Purpose. To provide detailed guidance for the administration of facilities projects at Navy shore activities. This instruction has been completely revised and should be reviewed in its entirety.

2. Cancellation. OPNAVINST 11010.20E.

3. Discussion. This instruction implements reference (a) and reaffirms reference (b) for construction, repair and maintenance of real property at all Navy shore activities. Compliance with the laws and regulations related to facilities projects has been the subject of detailed review by Congress. This manual has been revised to incorporate recent changes in laws and regulations, and to provide a clear statement of the authorities delegated to activity commanding officers, and major claimants. The manual includes the new requirement for Assistant Secretary of the Navy (Installations and Environment) approval of repair projects over \$5 million. Authority for technical review and approval of projects is delegated to major claimants; the Naval Facilities Engineering Command will continue to have an advisory role.

4. Scope. This instruction applies to all facilities projects, regardless of cost or method of accomplishment, financed from:  
(a) Operations and Maintenance, Navy and Naval Reserve, (b) Research, Development, Test and Evaluation, Navy, (c) Military Construction, Navy and Naval Reserve, (d) non-appropriated funds,

(e) Other Procurement, Navy, and (f) Defense Business Operations Funds (DBOF). The provisions of enclosure (1) also apply to non-capitalized undertakings at DBOF activities. This instruction does not apply to facilities projects financed from: (a) Family Housing, Navy, (b) Base Realignment and Closure, (c) military construction projects solely for the acquisition of real estate (Class 1 property), (d) funds from governments other than the United States of America, or (e) private funds. This instruction does not apply to projects financed from the Environmental Restoration, Navy appropriation or projects financed by the Defense Commissary Agency, except in cases where new Class 2 real property would be added to a Navy activity's plant account.

5. Action. All Navy commands and personnel involved with facilities projects shall comply with the provisions of this instruction.

6. Forms

a. The following forms are available in the Navy supply system and may be requisitioned per CD ROM NAVSUP PUB (NLL):

DD 1391 (12/76) FY 19\_\_ Military Construction Project Data  
(S/N 0102-LF-001-3910)

DD 1391c (12/76) FY 19\_\_ Military Construction Project Data  
Continuation Sheet (S/N 0102-LF-001-3915)

NAVFAC 11013/7 (Rev. 1-78), Cost Estimating Form  
(S/N 0105-LF-010-1335)

b. Forms NAVFAC 11014/64, NAVFAC 11014/64A, NAVFAC 11014/66, and DD 1390S, which were contained in the previous instruction, are not required by this revision.

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# **FACILITIES PROJECTS MANUAL**

## Chapter 1

# INTRODUCTION

### 1.1. Purpose

Facilities projects are prepared in support of the activity's mission and to meet the Navy's goals. Congressional interest in the proper and effective use of program resources make the classification of work in facilities projects very important. This manual provides policy and guidance for the preparation, submission, review, approval, and reporting of facilities projects at Navy shore activities. Facilities projects procedures and documentation requirements are used to assure approval of the right work by the proper command level.

### 1.2. Policy

a. Operation, maintenance, repair, and construction of Navy real property shall be:

- (1) Consistent with law, Congressional guidance, Department of Defense (DoD) policy, and Navy guidance.
- (2) In direct support of mission requirements.
- (3) Performed in full consideration of total life-cycle costs.
- (4) Accomplished through the most economic means.

b. Restrictions on the use of appropriated funds are established by Congress in the following laws:

- (1) 31 U.S.C. 1301(A) - requires that appropriated funds be used only for the programs and purposes for which the appropriation is approved.
- (2) 31 U.S.C. 1517 - prohibits authorizing an obligation more than the amount available in an appropriation or permitted by agency regulations.

### 1.3. Content

a. Facilities projects involve work on real property. This manual addresses the four classifications of facilities projects



and the associated documentation and processing requirements (see chapter 2). The classifications of facilities projects are:

- (1) Repair ( **chapter 3**).
- (2) Maintenance ( **chapter 4**).
- (3) Equipment installation ( **chapter 5**).
- (4) Construction ( **chapter 6**).

b. Excluded from the provisions of this manual are:

(1) Projects financed solely from appropriations for procurement that do not include work classified as construction or equipment installation (see paragraph **5.1.3**).

(2) Projects financed from appropriations for family housing construction and maintenance.

(3) Projects authorized by 10 U.S.C. 2353 and funded from Research, Development, Test and Evaluation (RDT&E) appropriations for facilities and equipment provided to a contractor.

(4) Projects solely for the acquisition of real estate (Class 1 property; see Naval Facilities Engineering Command Publication, NAVFAC P-73).

(5) Projects funded with appropriations for Base Realignment and Closure.

(6) Projects funded with appropriations from governments other than the United States of America.

(7) Projects funded with private funds.

(8) Projects financed from the Environmental Restoration, Navy appropriation or projects financed by the Defense Commissary Agency (DeCA), except in cases where new class 2 real property would be added to an activity's plant account.

#### **1.4. Summary of Changes to Manual**

The following is a listing of the significant changes and additions from the previous issue of OPNAVINST 11010.20:

a. **Chapter 1.** Establishes policy for operation, maintenance, repair and construction of Navy real property. Includes restrictions on the use of appropriated funds.

b. **Chapter 2.** Establishes procedures for preparation and submission of documentation for facilities projects, including the use of the FY\_\_ Military Construction Project Data submittal

(DD 1391) and Project Data Sheet. Included are definitions of funded and unfunded project costs, limits of authority, classification of property and classification of work for facilities projects. Includes the Office of Financial Management and Budget (FMB) requirement that all repair and maintenance projects costing more than \$2 million be supported by an economic analysis. Implements the new statutory requirement for Assistant Secretary of the Navy (Installations & Environment) (ASN(I&E)) approval of repair projects costing more than \$5 million. Delegates to major claimants the approval authority for increases of up to 25 percent in cost of ASN(I&E)-approved repair projects.

Delegates authority for technical review of projects to major claimants, and continues the role of the Engineering Field Divisions (EFDs) of the Naval Facilities Engineering Command in an advisory capacity, unless otherwise designated by the claimant. Recommends that during design of special projects, metric units be used for project design.

c. **Chapter 3.** Establishes policy for the classification of repair work. Revises the definition of repair to permit accomplishment of modifications or addition of interior facility components or materials as repair when required for compliance with current life safety standards, building codes, or environmental regulations. In addition, based on FY 1995 legislation, repairs are defined to include replacement of fully-functional energy consuming equipment with more efficient equipment (i.e.: a payback of 10 years or less). Includes a new definition of utility systems for facilities projects purposes.

This expanded definition can incorporate generation plant equipment, distribution lines, and the buildings that house the equipment into a single real property facility.

d. **Chapter 4.** Defines specific and recurring maintenance work for facilities projects. Includes examples of maintenance work.

e. **Chapter 5.** Establishes policy for installation of personal property in existing facilities. Revises the definition

of equipment installation to permit the installation of personal property in "other than new" real property facilities. This expanded definition will allow the installation of equipment on outside pads or foundations. Implements policy for funding equipment installation with the same appropriation as used for the actual equipment procurement.

f. **Chapter 6.** Establishes policy for construction projects funded by the installation, funded by the claimant, and funded with military construction (MILCON) appropriations. Addresses incrementation of construction projects. Requires that improvements to multiple real property facilities, for the same mission requirement, purpose and category code, must be considered a single undertaking. Adds criteria that must be met when accomplishing multiple minor construction projects in the same real property facility.

g. **Chapter 7.** Adds approval requirements for diversion of covered storage spaces. Revises the limits of authority for projects that are funded with non-appropriated funds.

h. **Appendix A.** Includes an updated list of DoD, SECNAV, COMNAVFACENGCOM, COMNAVSUPSYSCOM, and FMB instructions and publications referenced in this instruction.

i. **Appendix B.** Includes updated tables for Operations and Maintenance, Navy (O&MN); Research, Development, Test, and Evaluation; (RDT&E); Other Procurement, Navy (OPN), Defense Business Operations Fund (DBOF), and Operations and Maintenance, Navy Reserve (O&MNR)- funded projects showing the new maximum authority levels for activity commanding officers.

j. **Appendix C.** Includes examples of completed forms DD 1391 and DD 1391c used in submitting facilities projects and the guidelines on how to complete them. Also, included is an example of a completed Cost Estimate form, NAVFAC 11013/7.

## Chapter 2

# PROCEDURES FOR FACILITIES PROJECTS

### Part 1. GENERAL INFORMATION

#### 2.1.1. Definitions

a. Project. A single planned undertaking of construction, repair, maintenance, or equipment installation, performed either separately or in combination, to satisfy a finite requirement of work.

b. Special Project. A project whose funded cost exceeds the commanding officer's approval limits as specified in appendix B, and in the case of construction projects, is below the Military Construction (MILCON) threshold for cost. Major claimants may set the approval limits of their commanding officers at levels below those contained in this instruction.

c. Supervision, Inspection and Overhead (SIOH) and Contract Administration. These are costs charged by Naval Facilities Engineering Command (COMNAVFACENGCOM) for support associated with the administration of contracts for facilities projects.

d. Defense Business Operations Fund (DBOF). A working capital fund used to finance the operations of some shore activities.

e. Funded Project Cost. Costs used when determining who holds approval authority for a facilities project. Funded project costs for facilities projects include the following:

(1) Labor. Labor costs for in-house civilian employees are calculated based upon guidance in the Navy Comptroller Manual, Volume 3, paragraph 035030, or Volume 5, Chapter 4, Section IV, as appropriate. When the work is accomplished by contract, include the labor component of all contract costs except architectural and engineering fees. Military labor is not a funded cost (see paragraph 2.1.1f(1)).

(2) Material. The cost of direct material (government or contractor furnished) used in accomplishing the project.

(3) Equipment. The cost of all built-in equipment (government or contractor furnished).

(4) Land. The cost of land for the proposed project only if acquired under the authority of 10 U.S.C. 2673.

(5) Overhead. That portion of activity operations or support that represents additional costs and would not have been incurred were it not for the project (e.g.: administration or inspection of the construction). Contractor overhead and profit is a funded cost. Government SIOH and contract administration as identified in NAVFACINST 7820.1H are funded costs. As of FY 1996, contract administration costs for Navy and Marine Corps O&M funded projects are no longer centrally funded, and are charged for each COMNAVFACENGCOM-executed facilities maintenance, repair, minor construction, and service contract.

(6) Transportation. The costs applicable to transportation of materials, supplies, Class 2 equipment (see paragraph 2.1.4) and government-owned material and equipment. Projects accomplished by Naval Construction Forces shall include these costs only when a deployment is intended for the sole purpose of accomplishing a particular project. The cost of transportation of materials transferred between supply offices is not included as a funded project cost.

(7) Surplus stock. Cost of materials, supplies, and items of installed equipment obtained from surplus stocks within the Navy or Marine Corps. Pricing of the property must be equal to that charged by the surplus stock manager or at the estimated fair market value.

(8) Travel. The cost of travel and per diem applicable to Seabee labor is a funded project cost only when a deployment is intended for the sole purpose of accomplishing a particular project (see Navy Comptroller Manual, Volume 3, paragraph 035750).

(9) Construction equipment. Costs applicable to maintenance and operation of government-owned equipment used in the execution of a project. Also, costs applicable to construction equipment rentals.

f. Unfunded Project Costs. Costs excluded when determining who holds approval authority for a facilities project. Unfunded project costs for facilities projects include the following:

(1) Military labor. All costs financed from Military Personnel Appropriations (guidance provided in the Navy Comptroller Manual, Volume 3, paragraph 035750).

(2) Depreciation. Costs applicable to the depreciation of government-owned equipment.

(3) Surplus stock from outside the Navy or Marine Corps. Cost of materials, supplies, and items of installed equipment obtained for a project from sources outside the Navy or Marine Corps, e.g.: excess distributions from other government agencies.

(4) Planning and design. Costs associated with preparation of design plans and specifications (Architect and Engineering (A&E) contracts and in-house design costs) and costs to develop Operation and Maintenance Support Information (OMSI) products for specific projects. However, in design-build contracts, the cost of design is part of the project funded cost.

(5) Professional services. Cost associated with engineering services, e.g.: soil boring, surveys, inspections, and various types of testing and analyses.

(6) Personal property. Items bought from appropriations for procurement, e.g.: class 3 and 4 plant property (see paragraph 2.1.4).

g. Current Plant Value (CPV). The original acquisition cost of a facility, plus capital improvements, escalated to current prices using a formula in the NAVFAC P-164. CPV is intended to reflect the current cost to replace a facility with one of the same size and type of design and construction.

h. Plant Replacement Value (PRV). The cost to construct a replacement facility using current building codes, design criteria, and materials. PRV is calculated from the size of the current facility, published DoD unit costs for that type of facility, the local area cost factor, design, contingency, and SIOH.

i. Real Property Facility. A real property facility is a separate and individual building, structure, or other real property improvement assigned a 5-digit category code (DODINST 4165.3 and NAVFAC P-72). The 5-digit basic category code making up the largest floor area in the building is used as the category code for a multiple-use facility.

j. Contract Administration. As of FY 1996, contract administration costs for Navy and Marine Corps O&M funded projects are no longer centrally funded, and are charged by COMNAVFACENGCOM for the administration and execution costs of each maintenance, repair, minor construction, and service contract (see paragraph [2.1.1e\(5\)](#)). This policy change does not affect the SIOH charged to MILCON projects.

### **2.1.2. Limits of Authority**

Approval authority limits for facilities projects for regular shore activities, DBOF activities and reserve activities are listed in appendix B. The dollar amounts listed are total funded project cost. These limits represent the maximum authority the major claimant may delegate to the local activity commanding officer (see [paragraph 2.1.1e](#)).

### **2.1.3. Fund Sources**

Facilities projects are financed from one of three broad categories of funding sources.

a. Appropriated Funds. Appropriated funds are provided by the Congress through specific legislation. Examples include MILCON appropriations, operations and maintenance appropriations, and appropriations for procurement.

b. Non-appropriated Funds. Non-appropriated funds consist of cash and/or other assets received from sources other than that appropriated by Congress. Examples include revenues generated from retail sales, private funds received from non-government entities, and public funds from governments other than the United States of America.

c. Working Capital Funds. Working capital funds are generated locally through the sale of products and services

(generally industrial). The principle working capital fund in DoD is DBOF.

#### **2.1.4. Classification of Government Property**

Government property includes all physical assets owned by the government. The four classes of plant property (Navy-owned real property and personal property of a capital nature) are:

- a. Class 1. Land.
- b. Class 2. Real property improvements to land, such as, buildings, structures, ground improvement structures, and utilities.
- c. Class 3. Personal property of a capital nature, other than industrial plant equipment, having an estimated or actual initial acquisition cost of \$100,000 or more.
- d. Class 4. Industrial plant equipment (personal property) having an estimated or actual initial acquisition cost of \$100,000 or more. This equipment is generally used for cutting, abrading, grinding, shaping, forming, joining, testing, measuring, heating, treating, or otherwise altering the physical, electrical or chemical properties of materials.

#### **2.1.5. Classification of Work**

When a facility requirement is identified, the government property must first be classified according to the classification of Government property as per the FMB Manual, Volume 3. Second, the work associated with satisfying that requirement must be classified according to the four classifications of work. Once the classification of work decision is made, the appropriate funding source for the requirement can then be determined (see **paragraph 2.3.4.c**). The four classifications of work are:

- a. Maintenance. Work to maintain an existing facility and existing facility components in their customary state of operating efficiency (see **chapter 4**).
- b. Repair. Primarily work to renew or replace deteriorated components of a facility for continued utilization for its existing, designated purpose (see **chapter 3**).



c. Construction. Work to build a new facility, or alter an existing facility (see [chapter 6](#)).

d. Equipment Installation. Work to support the installation of an item of personal property in an other than new real property facility (see [chapter 5](#)).

### **2.1.6. Reporting**

The funding and execution of facilities projects (other than MILCON) is highly decentralized throughout the Navy. Activities, sub-claimants, and major claimants may establish their own periodic reporting requirements for effective planning, programming and execution of their facilities projects programs.

## **PART 2. PROJECT DOCUMENTATION**

### **2.2.1. Documentation Requirements**

Documentation is required for all projects listed below; dollar amounts are total funded project costs (see [paragraph 2.1.1e](#)). The documentation requirements listed below do not apply to MILCON projects; see **NAVFACINST 11010.44** for MILCON project documentation requirements. Major claimants may set lower cost thresholds to correspond to approval authority delegated to activity commanding officers.

a. Minor construction projects over \$200,000 .

b. Repair and maintenance (i.e.: specific maintenance):

(1) For projects over \$1,000,000 for O&M or RDT&E funded work, and over \$3,000,000 for DBOF funded work (or lower claimant delegated activity approval threshold), project documentation shall be submitted by the activity.

(2) For projects between \$500,000 and the limits listed above in paragraph 2.2.1b(1), project documentation shall be completed by the activity, signed by a responsible official, and retained with the project files for at least 5 years.

c. Equipment installation projects over \$200,000.

d. Combination projects (more than one classification of work over \$300,000).

e. Repair projects over \$500,000 and in excess of 50 percent of facility replacement value.

## 2.2.2. Types of Documentation

a. Despite the title of the form, the "Military Construction Project Data," DD 1391 has been selected as the primary format to document facilities projects as specified in paragraph 2.2.1. This form may also be used for those projects for which specific documentation requirements do not apply. The MILCON Project Data Sheet (PDS) shall be used when local activity documentation is required for projects under their authority. Appendix C contains samples of **DD 1391**, **DD 1391c** (the continuation sheet), and NAVFAC 11013/7.

b. If a preliminary, less detailed project submission is desired and specified by major claimants, the PDS shall be used to initially document facilities projects. Refer to **NAVFACINST 11010.44** or NAVFAC E-1 (NOTAL) for preparation of a PDS. The E-1 is the NAVFAC Installation Planning, Design, and Management Guide which provides policy and technical guidance for field activities.

## 2.2.3. Project Numbering

a. Each special project must be assigned an identification number. These identification numbers are recorded on the DD 1391, used in the Annual Inspection Summary (AIS) (maintenance and repair items) per OPNAVINST 11010.34, and used in preparing the Base Readiness Report (BASEREP) per OPNAVINST 3501.167.

b. Each identification number shall contain a letter prefix indicating the category of work included in the project as follows:

"C" for construction,

"R" for repair,

"M" for maintenance, and

"E" for equipment installation (installation of personal property).

c. Follow the letter prefix with a number assigned in numerical sequence, running consecutively as projects are identified within a fiscal year, regardless of the category of work involved. The last two digits of the special project number represent the fiscal year the project was identified.

d. The identification number for projects which are a combination of more than one type of work will include the first letter for each type of work in the project. The first letter of the project number should represent the work classification having the highest cost. Each successive letter should be included in descending order by the cost of that type of work.

e. Examples of the assignment of project identification numbers are listed below:

R1-92, Repair Roof, Administration Building 162.

RC2-92, Repair and Extend Electrical Distribution System, Area A.

R3-92, Repair Air Conditioning, BOQ Building 353.

C4-92, Addition to Warehouse Building 64.

CR5-92, Extend and Repair Transit Shed 45.

EC6-92, Air Conditioning for Computer Room, Building 261.

Thus, the third project identified in Fiscal Year 1992 is shown as R3-92, the fifth project as CR5-92. Assigned numbers will remain for the life of the project, though the letter identification may change with types and amount of work in the project.

f. Project identification number shall not be used to indicate project priority.

g. The project identification number will not change when the work is accomplished in phases. The project documentation must include the cost of each phase. (See also [paragraphs 2.2.9b, 2.3.2, 2.4.3, and 3.2.2](#)).

#### **2.2.4. Project Titles**

a. Project titles must be specific; a vague or misleading title for a project may confuse reviewers throughout the chain of command. The title should specifically identify the facility function, building number, and the type of work to be done.

b. Construction project titles shall include the terms addition, extension, alteration, and expansion, as appropriate. Titles for equipment installation projects shall use wording that indicates the work applies to installation of personal property, e.g.: "Installation of Computer System, Building 43" or "Alterations and Equipment Installation of UPS, Building 21."

Repair project titles shall include the terms "repair" or "replace" as appropriate; less specific terms such as "rehabilitation" or "renovation" shall be avoided.

c. Combination project titles shall include terms which highlight the major types of work being accomplished.

### **2.2.5. Project Scope**

a. The requirement associated with satisfying a facilities deficiency makes up the project scope. The project scope must include all work necessary to produce a complete and usable facility, or a complete and usable portion of a facility.

b. Facilities projects generally encompass a single real property facility. All work associated with meeting a requirement in a particular facility must be incorporated in the project scope.

(1) Where multiple projects are contemplated in a single real property facility, see paragraphs **3.2.2, 6.2.1, and 6.2.3.**

(2) Where a requirement may involve work in more than one real property facility, see paragraph **6.2.1.**

c. Projects which involve not only the construction or repair of a facility, but also the extension of new primary utility systems to the project site must include both the facility work, and the utility work in the project scope.

d. Properly identifying the project scope is independent of the selected method(s) of accomplishing the work. If the selected method of accomplishment is a construction contract, then appropriate consideration should be given to the proper scope of the contract. There is, however, no direct relationship between contract scope and project scope. Additional guidance on project scope can be found in paragraphs 2.4.2, 3.2.2, 4.1.3, 5.1.1, and 6.1.1, and appendix C.

### **2.2.6. Project Justification**

Each project must be justified on the basis of mission, life-cycle economics, health and safety, environmental compliance, quality of life, or some combination of the above (see paragraphs **3.2.2b, 4.2.2b, and 6.4.6b**). The need for a proposed project must be

supported by verifiable cost data, and an adequate description of the requirement in the narrative portions of the project documents. Project requirements for repair and maintenance should also be reflected by the activity AIS and BASEREP.

### **2.2.7. Project Technical Solution**

The proposed solution to a facilities requirement must withstand critical review by competent technical experts. Technical solutions should address concerns for reliability, maintainability, constructability, and safety. When applicable, technical solutions must also address concerns for legal compliance, energy conservation, environmental compliance, and the use of unproven technologies. In all cases, the benefits resulting from the technical solution must be weighed against the cost.

### **2.2.8. Economic Analysis**

a. A formal net present value life-cycle economic analysis is required for:

(1) All repair projects with an estimated cost which is greater than \$500,000 and more than 50 percent of the facility replacement cost.

(2) All repair projects with an estimated cost greater than \$2,000,000.

b. Guidelines and formats for preparing economic analyses are contained in the NAVFAC P-442. Discount factors are updated annually and published in the Office of Management and Budget Note 7111 (NOTAL). Results of analyses are to be summarized and listed on the DD 1391.

### **2.2.9. Cost Estimating**

a. Cost Estimating Form, NAVFAC 11013/7 (appendix C), or a similar form shall be used in submitting cost estimates for all special projects. The project cost estimate may either have the contractor overhead and profit, inflation, and contingencies within each line item of the estimate, or these costs may be listed separately at the end of the cost estimate. In either case, the rates used for each of these items must be shown at the

end of the cost estimate. Costs for planning, design, and SIOH or contract administration shall be identified as separate line items in the cost estimate (see paragraphs **2.1.1e(5) and 2.1.1j**). Itemize specific quantities and unit costs for each item whenever possible, instead of using lump sum costs. For combination projects, the cost estimate must identify the classification of work (construction, repair, maintenance or equipment installation) for each line item or group of line items in the cost estimate. Identify separately all government furnished installed equipment and materials which are funded costs. Estimated costs must be based on current prices and escalated to the year proposed for project execution.

b. When a project is phased (see paragraph **2.2.3f**), a cost estimate must be prepared for each phase. Combination projects that include minor construction must show the construction cost in each phase to assure the \$300,000 minor construction cost limitation is not exceeded (see paragraph **2.4.3b**).

c. The international balance of payment evaluation process required by DODINST 7060.2 for construction, repair, and maintenance of real property projects outside the United States must be included in the cost estimate at the 35 percent design stage.

d. MIL-HDBK 1010/1 provides additional guidance on cost estimating procedures.

## **2.2.10. Supporting Documentation**

In addition to the requirements listed above, projects should be supported with photographs, charts, maps, and drawings to the extent necessary to fully communicate the location, scope, complexity, unusual costs, and urgency of the project. These documents which supplement the narrative description of the project will often reduce review time and expedite project approval and funding.

### **2.2.11. Units of Measure**

Beginning with the FY 1997 programs, metric units will be used in design and construction work for MILCON, Base Realignment and Closure, and family housing projects. In designs for special projects, the use of metric units is encouraged.

## **PART 3. PROJECT SUBMISSION**

### **2.3.1. Submission Process**

Figure 2.1 illustrates the typical process flow for facilities projects. This process balances the Navy's decentralized operation and maintenance of physical plant assets with appropriate major claimant oversight to ensure consistency and integrity. Figure 2.1 does not attempt to address the process flow for all projects under all circumstances, but rather provides a general framework for satisfying a facilities requirement from project documentation to execution. Major claimants can request the servicing Engineering Field Divisions or Engineering Field Activities (EFD/EFA) to conduct an independent technical review and endorsement of special projects. Activities should consult with their chain of command for specific submission requirements.

Key steps in the process are discussed in the following paragraphs.

### **2.3.2. Documentation Process**

Project documentation is a critical first step with three principle objectives. First, preparing documentation provides a methodology for addressing all concerns related to the facilities requirement including operational, technical, financial, legal, environmental, and social. Second, it provides a vehicle for obtaining, when required, approval and/or funding. And third, documentation provides a record of what actions were taken to address a particular facilities requirement and how those actions were funded. Detailed procedures for preparing project documentation can be found in chapter 2, part 2.

### 2.3.3. Planning and Programming

Planning and programming are administrative steps involving projecting requirements into the future and allocating resources to the highest priority needs. These actions are generally carried out at the activity level for DBOF funded activities, and at both the activity and claimant levels for mission funded activities. The purpose for these steps is to provide a mechanism for making investment decisions concerning real property assets.

### 2.3.4. Project Validation

a. The activity commanding officer is responsible for the validity and accuracy of facilities projects prepared for his or her plant account, including satisfying requirements for site approval such as explosive or airfield safety (see **NAVFACINST 11010.44**) and earthquake safety investigation (see NAVFACINST 11012.145). When required, the activity will forward project documentation to the major claimant for review and approval.

b. Major claimants will validate all special projects that meet the criteria listed below; dollar amounts are total funded project costs (see paragraph **2.1.1.e.**). Lower activity authority thresholds may be established at the discretion of the major claimant:

- (1) Minor construction projects over \$200,000.
- (2) Repair or specific maintenance projects over \$1,000,000 for O&MN or RDT&E funded work, and over \$3,000,000 for DBOF funded work.
- (3) Equipment installation projects over \$200,000.
- (4) Combination projects (more than one classification of work) over \$300,000.
- (5) Repair projects over \$500,000 and in excess of 50 percent of facility replacement value.

c. The major claimant should review and validate all projects that have a reasonable chance of being funded. The major claimant's review includes verification of:

- (1) Proper classification of government property. {seq  
Figure \\* \h }



- (2) Proper classification of work (i.e.: maintenance, repair, construction, or equipment installation).
  - (3) Proper source of funds.
  - (4) Adequacy of the technical solution.
  - (5) Completeness of scope and cost estimate.
  - (6) Adequacy of economic analysis (when required).
  - (7) Compliance with the Shore Facilities Planning System,
- and
- (8) Environmental compliance, environmental review (see OPNAVINST 5090.1), and safety compliance.

d. For projects requiring additional approvals, the major claimant will prepare an endorsement and forward the project to the appropriate approval authority. For projects requiring no further approvals, project approval shall be as designated by the claimant. Options include preparation of a validation and approval letter to the submitting activity, or actual authorization for design and/or construction of the project. The project may also be returned to the activity disapproved, or with comments and desired actions. The major claimant shall retain a copy of activity project documentation, correspondence, and project validations, approvals, and authorizations in the major claimant's project files for at least 5 years.

e. Engineering Field Divisions and Field Activities (EFDs and EFAs) shall continue to provide technical reviews of special projects if so requested by major claimants. Activities or claimants who desire a technical review of projects not meeting the criteria listed above in subparagraph b, may also arrange for such services with the EFD/EFA. Major claimants shall provide guidance to their activities concerning which projects require EFD/EFA technical review.

f. At the request of the respective major claimant or activity, the servicing EFD/EFA will assist the activity/claimant and make recommendations concerning special projects with emphasis on the technical review. The EFD/EFA will forward their recommendations to the major claimant or preparing activity as appropriate.

g. Projects involving restricted facilities (see paragraph **7.1.1**) should be forwarded by the major claimant to the appropriate approval authority.

h. Projects involving work classified as construction exceeding \$300,000 shall be forwarded by the major claimant for approval and funding from the MILCON appropriation per **NAVFACINST 11010.44** (see also **chapter 6**).

### **2.3.5. Major Claimant Approval**

a. Special projects above the commanding officer's authority must receive approval by the major claimant or higher authority. The approval levels for facilities projects are listed in appendix B.

b. The current plant value, found in the NAVFAC P-164, will be used as the replacement value of a facility until current plant values are converted to plant replacement values in the NAVFAC P-164. Then the plant replacement value will be used as the replacement value of a facility. If the current plant value does not appear to accurately reflect the replacement value of a facility, an estimate of the facility replacement cost can be prepared using MIL-HDBK-1010/1 as a guide.

c. Projects will be documented, validated and approved in accordance with paragraphs 2.2.1 and 2.3.4 of this instruction. An endorsement by the major claimant indicates the project has been validated and approved for funding at a specific funded cost level. This amount (or maximum amount established by the claimant) may not be exceeded during execution without additional approval from the major claimant. Requests for approval of increased amounts should address any change in scope, the reason for cost increase, and a cost estimate in as much detail as required.

### **2.3.6. Assistant Secretary of Navy (Installations & Environment) Approval**

a. In addition to the validation discussed in paragraph 2.3.4, repair projects over \$5 million must receive an additional review by CNO(N44) and approval by ASN(I&E). These repair

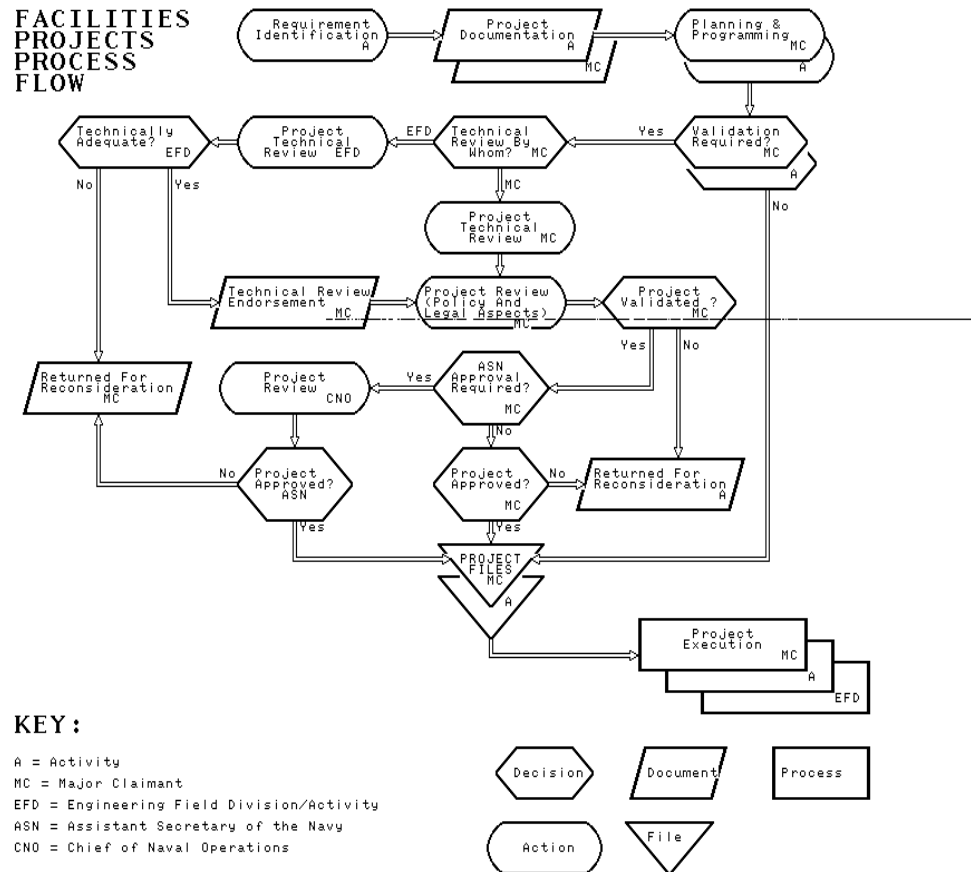
projects must be consistent with force structure plans, be more cost effective than replacement, and an appropriate use of operations and maintenance funds.

b. Projects should be for-warded to CNO(N44D) with a major claimant endorsement. The major claimant should indicate in their endorsement the fiscal year (or years in the case of "swing" projects) in which the project will be funded.

c. Once approved by ASN(I&E) at a specific cost level, that amount may not be exceeded by more than 25 percent during execution without additional approval. The major claimant may approve, in writing, within-scope increases to 125 percent of the original approved amount. Requests for approval of increased amounts should address the scope of the change, cost of the change, reason for cost increase, and a complete revised cost estimate. Local activities in coordination with the contracting office handling the construction contract must advise the claimant of pending changes which will result in exceeding the prior approved amount.

d. Projects which include minor construction and combine appropriated and non-appropriated funds in a single undertaking must also be approved by ASN(I&E) (see paragraph [6.2.2](#)). Such projects shall be submitted via CNO (N44D).

FIGURE 2.1 FACILITIES PROJECTS PROCESS FLOW



## **PART 4. PROJECT EXECUTION**

### **2.4.1. Execution Options**

Once approved and to be funded, a facilities project may proceed to execution. The execution agent may be the activity, the claimant, the servicing EFD/EFA, a local Public Works Center, or a special program sponsor. Options for accomplishing the work include using in-house shop forces, a construction contract, tasking a Base Operating Support (BOS) contractor, utilizing a turnkey contract (see paragraph **5.2.1**), employing the Naval Construction Force, applying self-help labor, or a combination of the above. Whichever option is selected, activities and claimants must continually balance workload, resources, and readiness to optimize the condition of their real property assets.

### **2.4.2. Execution Packaging**

a. Activities and claimants are afforded maximum flexibility to package work for execution as necessary to enhance readiness and to take advantage of economy of scale. Work planned for execution by contract may, for example, be packaged in any of the following ways:

- (1) A single project accomplished with a single contract.
- (2) A single project accomplished with multiple contracts.
- (3) Multiple projects accomplished with a single contract.
- (4) Multiple projects accomplished with multiple contracts.

b. Decisions regarding execution packaging must be based on an understanding of the distinction between project scope and contract scope. Project scope is the substance of this instruction (see paragraph **2.2.5**). Contract scope is addressed in the Federal Acquisition Regulations and implementing directives.

### **2.4.3. Special Considerations**

a. Combination projects. Combination projects generally require special handling during execution because of funding concerns. The following examples are provided for illustration.

- (1) An "EC" project (see paragraph **2.2.3**) to install a training simulator may require split funding with the

appropriation used for equipment procurement also used for the equipment installation, and an appropriation available for minor construction used for the building alterations.

(2) An "RC" project to repair and alter an administration building may be funded partially by the host activity for repairs, and partially by the tenant for the alteration work.

(3) An "RC" project to repair and extend a heating and ventilation system may encounter funding difficulties if during execution the contract must be modified for an unforeseen condition. As the contract price increases, the funds source used to pay for the construction portion of the project scope may change to appropriations for MILCON due to the statutory limitation on minor construction.

b. Phasing. Large maintenance and repair projects may be phased to assure efficient use of available resources. Phasing is also possible in combination projects. Phasing of minor construction projects is strongly discouraged. Phasing may permit accomplishment of the most urgent portion of a project within available funds. See also paragraphs [2.2.3g](#), [2.2.9b](#), and [3.2.2a](#).

c. Self-Help. Department of Defense policy states that construction, repair, maintenance, and operation of real property must be accomplished through the most economic means available, consistent with military and statutory requirements. To support the morale and retention of Navy personnel, there is a continuing need to enhance the habitability of Bachelor Quarters and improve personnel support, welfare, and recreational facilities. A Self-Help Program can make such improvements using military personnel for maintenance, repair, alterations, and new construction. Additional guidance and responsibilities have been provided to all Navy commands for the development and use of local Self-Help Programs (see OPNAVINST 11000.8).

## Chapter 3 REPAIR

### Part 1. GENERAL INFORMATION

#### 3.1.1. Definition

Repair is the return of a real property facility to such condition that it may be effectively utilized for its designated purposes, by overhaul, reconstruction, or replacement of constituent parts or materials which are damaged or deteriorated to the point where they cannot be economically maintained.

a. Repairs to an existing facility may include modification or addition of building or facility components or materials which are required for compliance with current life safety standards, recognized national or regional building codes, or environmental regulations. Items which may be classified repair under these guidelines include:

- (1) Correcting seismic or life safety deficiencies.
- (2) Installing fire protection.
- (3) Removal of asbestos material.

b. Consistent with the definition of construction, repair does not include additions, expansions, alterations, or modifications required solely for a change in purpose or mission, or in preparation for future construction requirements.

#### 3.1.2. General Policy for Repair Projects

a. When repair projects involve replacement of constituent parts, the item(s) installed shall serve the same purpose.

b. Repairs may include replacement of the current materials with substitute materials.

c. Incident to a major facility repair the following work may be classified within the scope of repair:

- (1) Relocation and minor additions to components in an existing facility to return it to its customary state of operating efficiency, e.g.: additional partitions installed during repair of deteriorated interior partitions.

(2) Replacement of facility components, built-in equipment, or systems with items of higher quality or more durable materials to conform with current design criteria. The replacement items will not substantially increase the capacity or change the function of the components, equipment, or systems, unless there is no alternative to such replacements.

d. Energy efficient maintenance permits the repair by replacement of fully functioning energy consuming equipment or systems with more efficient equipment when:

(1) the cost of replacing the energy consuming equipment or system can be recovered through cost savings within 10 years,

(2) the replacement does not substantially increase the capacity of the equipment or systems, and

(3) the new equipment or system provides the same end product (e.g.: cooling, heat, lighting), even though the equipment is not replaced in kind. For example, a leaking steam line serving a small, remote load may be "repaired" at the lowest life-cycle cost by installing a local boiler or heat pump at the load and by decommissioning the steam line. Repair projects for energy efficient maintenance must include all work necessary to make the new, more efficient equipment or system complete and operational.

e. The following actions shall not be classified as repair, except as indicated in paragraphs 3.1.1, 3.1.2, and 3.1.3:

(1) Extension of facility systems or components to areas not being repaired or previously served, i.e., extension of air conditioning system to a floor or wing not previously cooled.

(2) Increases to exterior facility dimensions or utility plant capacity.

(3) Alterations to existing bachelor quarters primarily intended to meet current DoD or Navy design standards.

f. Demolition of a facility or a portion of a facility because the extent of deterioration is such that it can no longer be economically maintained, or because the facility is a hazard to the health and safety of personnel, is classified as repair. Costs to close openings and cut off utilities are within the scope of repair. In order to ensure compliance with McKinney Act



requirements, approval of the cognizant COMNAVFACENGCOM Engineering Field Division is required prior to demolition of any facilities which are not to be replaced. For demolition projects that affect properties of historic or cultural significance, see paragraph 3.1.4. Proposed demolition of storage facilities (Category Codes 430, 440 and 450) must be reported to the Naval Supply Systems Command (Code 4251) (see paragraph 7.1.1). See paragraph 6.1.1d for demolition incident to new construction.

g. For facilities projects purposes, a utility system is a single real property facility which may include generation plant equipment, distribution lines and associated distribution equipment, and the building(s) or structure(s) which house these equipment components. Buildings which house utility systems or their components, if properly justified, are considered components of the utility system real property facility.

h. Pavement Condition Index (PCI) measurements performed on existing pavements should be shown on repair project documentation. Assistance in performing PCI measurements can be obtained from the servicing EFD/EFA.

i. In the repair of piping systems that have deteriorated, cathodic protection may be incorporated as a repair cost when economically justified.

### **3.1.3. Examples of Repair**

a. Replacement of all deteriorated interior partitions and adding some additional partitions required by a new interior layout.

b. Replacement of a deteriorated roof, correcting seismic deficiencies in the roof structure, and installing roof insulation.

c. Replacing broken pavement and paving unpaved shoulders (damaged by erosion or aircraft engine exhaust) with a thin layer of concrete or asphalt.

d. Replacing deteriorated mechanical equipment and providing new automatic controls.

e. Modifying window and door openings when necessary to take advantage of available manufactured sizes and to preclude special fabrication costs.

f. Paving existing eroded earth ditches with a thin layer of concrete or asphalt.

g. Replacement of a deteriorated and obsolete aboveground utility distribution system with a more economical underground system or vice versa.

h. Replacement of an existing deteriorated pipe, conduit, or duct with components larger than the original size to meet current design criteria.

i. Spot repair, overlay, resurfacing, and restoration of existing deteriorated pavement to make it serviceable to accommodate current missions.

j. The installation of cathodic protection on an existing facility to prevent corrosion damage is classified as repair, provided the requirement for cathodic protection developed after the facility is in operation. The installation of cathodic protection incident to the repair of a real property facility is classified as repair. In either case, the addition of cathodic protection must be economically justified. The installation of cathodic protection in a new facility is classified construction.

### **3.1.4. Projects for Places of Historic or Cultural Significance**

a. Commanders and commanding officers of all Navy shore activities are responsible for determining, at a project's earliest planning stages, if there will be any effect on properties eligible for the National Register of Historic Places.

Consultation with the State Historic Preservation Officer (SHPO) and the Federal Advisory Council on Historic Preservation may be required. Refer to OPNAVINST 5090.1 for the applicable prescribed guidelines and procedures.

b. COMNAVFACENGCOM provides technical advice, inter-agency coordination, and review services to commanding officers who need assistance with issues related to historic preservation (see SECNAVINST 4000.35 (NOTAL)).

## **Part 2. REPAIR PROGRAMMING**

### **3.2.1. Funding of Repair**

Repair projects shall be financed from appropriations available for operations and maintenance (O&MN, O&MNR, DBOF, RDT&E, etc.) or from internally generated funds at Defense Business Operations Fund (DBOF) activities. Repair, major restoration, or replacement of facilities which suffer extensive damage from catastrophes or acts of God may be accomplished under the authority of 10 U.S.C. 2854 (see paragraph [6.4.3](#)) and financed from appropriations for military construction (see DODINST 7045.7).

### **3.2.2. Scope of Repair Projects**

a. A project is defined as a single undertaking necessary to satisfy a finite requirement. A "finite requirement" of repair is considered to be all the work necessary to maintain serviceability or to prevent significant deterioration of a real property facility or a component of the facility. Normally, all planned major repairs in a single facility will be included in a single project. Multiple projects, however, may be undertaken for independent repair requirements. A repair project may be phased over more than 1 fiscal year when funding is not available in a single year for the entire project. Each phase must result in a complete and usable facility (see paragraphs [2.2.3f](#) and [2.4.3b](#)).

b. Deficiencies in an individual real property facility are normally detected as a part of the control inspection or specialized inspection programs (see NAVFAC MO-322 (NOTAL)). When prudent management dictates that such work of special project scope be scheduled and accomplished with local funds (see paragraph [2.1.1b](#)), it may be accomplished with the approval of the major claimant or higher authority. Requirements for documentation and major claimant legal and technical validation still apply. Generally, real property facilities that are not required to satisfy the approved Facilities Requirements Plan (FRP) should not be programmed for repair.

### **3.2.3. Incrementation of Repair**

- a. The scope of a repair project, or phase of a repair project, should result in a complete and usable facility or a complete and usable component of an existing facility.
- b. Except as discussed in paragraph 3.2.2, repairs shall not be subdivided into multiple projects for the purpose of avoiding approval by higher authority.
- c. Repair projects that are phased shall be reviewed and approved based on the total cost of all phases.

### **3.2.4. Approval Authority**

The maximum specific approval authorities for active shore activities, DBOF activities, and reserve activities are listed in appendix B. This authority may be reduced by the major claimant.

### **3.2.5. Submission Requirements**

Detailed project documentation, submission, and review requirements are contained in chapter 2.

## Chapter 4 MAINTENANCE

### Part 1. GENERAL INFORMATION

#### 4.1.1. Definition

Maintenance is the recurring, day-to-day, periodic, or scheduled work required to preserve or return a real property facility to such a condition that it may be used for its designated purpose. The term includes work undertaken to prevent damage to a facility that otherwise would be more costly to repair.

#### 4.1.2. Maintenance versus Repair

Judgment must be exercised in differentiating between maintenance and repair work. Generally, maintenance differs from repair in that maintenance does not involve the replacement of major constituent parts of a facility, but is the work done on such parts to minimize or correct wear and ensure the maximum reliability and useful life of the facility or component.

#### 4.1.3. Types of Maintenance

a. Specific maintenance is maintenance work on a facility generally performed on a specific job order (see NAVFAC MO-321 (NOTAL)). This work recurs over a given cycle but is not of a continuing nature on the particular facility. Examples of this type of maintenance are:

- (1) Major waterproofing and painting to preserve exterior and interior walls of buildings.
- (2) Major seal-coating of asphalt pavement.
- (3) Resealing all joints in runway concrete pavement.
- (4) Dredging to a previously established depth.
- (5) Cleaning storage tank interior deposits.

b. Recurring maintenance is preventive or recurring work to maintain the facility in operable condition. This work is highly repetitive on a portion of a facility.

## Part 2. MAINTENANCE PROGRAMMING

### 4.2.1. Policy

a. Maintenance shall be financed from appropriations available for operations and maintenance, or from internally generated funds at DBOF activities.

b. Specific maintenance shall be programmed as a special project according to the procedures in this manual when project funded costs exceed local approval authority.

c. Recurring maintenance shall be normally programmed in the activity's budget.

### 4.2.2. Discussion

a. Due to limited appropriations for operations and maintenance, greater emphasis must be placed on early detection of deficiencies. Prompt remedial action is crucial to preserve required reliability, and prevent larger and more costly repairs or complete replacement.

b. Generally, real property facilities that are not required to satisfy the approved FRP should not be maintained. They should be disposed of as excess to the needs of the activity (see NAVFAC P-73, OPNAVINST 11000.16, and **NAVFACINST 11010.44**).

c. Real property facilities scheduled for replacement in the Military Construction Programs shall be maintained only to the degree necessary to meet the projected need pending completion of the replacement facilities. Demolition of the existing facility is to be included in the MILCON project.

d. Submission of maintenance work as a special project request shall be the exception rather than the rule. Only in highly unusual cases is a special project request for maintenance to be sent to the major claimant for approval and funding. Such maintenance projects shall be submitted under one or more of the following circumstances:

(1) The project proposes major maintenance work (specific maintenance) that is beyond the resources normally provided for recurring maintenance work.

(2) The work is better accomplished as a single undertaking and completed as rapidly as possible to keep the facility in operational status with minimum delay.

(3) The funded project cost exceeds local approval authority and the claimant prefers to budget for and fund the requirement. Granting one-time project approval authority to activity commanding officers should be considered for maintenance projects.

#### **4.2.3. Maintenance of Communication Antennas**

a. Maintenance of communication antennas and antenna systems is under the responsibility of the Naval Computer and Telecommunications Command and the Naval Security Group Command. This work is not funded from normal real property maintenance funds, but rather another activity operations account (non-Real Property Maintenance (RPM), cost account 6A65, see volume 2 of the FMB Manual). The following items are considered part of an antenna system:

(1) The antenna structure, guy wires, ground planes, and other support facilities.

(2) The antenna field within the boundaries established at an activity for such a field (including maintenance of the grounds in the antenna field).

(3) Service roads to the antenna structure within the antenna field.

(4) Fencing that surrounds the antenna field and serves solely to isolate the field from the remainder of the station.

b. Maintenance of service access roads to the antenna field shall be funded from the proper real property maintenance account.

c. Antenna special projects, submitted to the command responsible for funding, shall be sent via the local EFD for technical review and site approval.

#### **4.2.4. Approval Authority**

The maximum specific approval authorities for active shore activities, DBOF activities, and reserve activities are listed in appendix B. This authority may be reduced by the major claimant.

#### **4.2.5. Submission Requirements**

Detailed project documentation, submission, and review requirements are contained in chapter 2.



## **Chapter 5**

# **EQUIPMENT INSTALLATION**

### **Part 1. GENERAL INFORMATION**

#### **5.1.1. Installation of Equipment**

Equipment installation is defined as modifications to real property (Class 2) required solely for the installation of an item of personal property. An equipment installation project may be undertaken within an existing real property facility, or adjacent to an existing real property facility. The intent is to permit the work normal to the equipment installation to be accomplished as an integrated undertaking. The intent is not to permit accomplishment of alterations under the guise of equipment installation.

#### **5.1.2. Personal Property**

Personal property includes accessory equipment and furnishings that are movable in nature and not affixed as an integral part of a real property facility. Personal property also includes specialized equipment (production, processing, medical, technical, training, servicing, and RDT&E equipment) that, although not movable in nature, is necessary for a specified function in a real property facility. Personal property includes Class 3 and 4 plant property, and ancillary equipment in support of end items of personal property. Personal property does not include "installed equipment" or other items of Class 2 property as defined in paragraph 6.1.1h.

#### **5.1.3. Procurement and Installation of Personal Property**

a. Procurement of Personal Property. The cost of equipment procurement includes the cost of equipment, transportation, unpacking, assembly, attachment, and testing of the personal property. The cost of procurement also includes the cost of ancillary equipment.

b. Installation of Personal

Property in New Real Property Facilities. In the construction of new real property facilities (including conversions, additions, expansions, and extensions) the construction shall be complete and the facility ready to receive the personal property. All known utilities, false floors, foundations, partitions, shielding, air conditioning, ventilation, and other requirements incidental to the installation of the equipment that are integral to the facility shall be included in the construction cost. The cost of making the final connections of the personal property shall be funded from the same procurement appropriation used to fund the equipment. The cost of making the final connections of relocated personal property shall be funded from an operations expense account (e.g.: O&MN, O&MNR, or DBOF). Equipment installation work that normally is a non-construction cost in existing facilities may be a construction cost when included in new facilities or additions to existing facilities.

c. Installation of Personal Property in Other Than New Real Property Facilities

(1) The cost of installing equipment (personal property) in other than new facilities is funded from the same appropriation used to purchase the equipment or system. An equipment installation project includes:

(a) The material and labor costs to install the ancillary equipment (air conditioning, uninterruptible power system, ventilation, etc.); and

(b) Items in support of the equipment (false floors, shielding, concrete pads, secondary utilities, etc.).

(2) The primary and ancillary equipment procurement costs shall be shown in the equipment installation project cost estimate to determine if it is an expense or investment. The total project is funded as investment (procurement appropriation) if the unit cost of each end item of equipment (the total procurement cost of a complete system if all the equipment when assembled becomes a system) is over \$100,000, or funded as expense (operations and maintenance appropriation) if the unit cost is \$100,000 or less (see FMB Manual, paragraph 075001). A system exists when several equipment components will be procured at the

same time and interconnected to operate as a unit. Investment is the acquisition of capital assets such as real property and equipment financed from MILCON and other procurement appropriations. Expense is the cost of resources consumed in operating and maintaining naval shore activities, and financed from operating accounts (e.g.: O&MN, O&MNR, RDT&E, or DBOF).

(3) Major structural changes to an existing facility, extension of primary utility distribution system, or construction of a major exterior support structure required for the equipment are construction costs.

(4) The cost of relocating an item of equipment (personal property) from one location to another is an expense cost funded by activity operating funds.

## **Part 2. EQUIPMENT INSTALLATION PROGRAMMING**

### **5.2.1. Policy**

The "equipment installation" costs (excluding the cost to procure the personal property) in other than new facilities shall be funded from the same procurement appropriation used for the equipment. Equipment installation "turn-key" projects are those when a single contractor is providing for the equipment and installation in a single contract. Construction in combination with turn-key equipment installation projects shall not be funded from appropriations for procurement unless specifically approved by Congress.

### **5.2.2. Approval Authority**

a. The maximum approval authority for equipment installation projects is listed in appendix B. This authority may be reduced by the major claimant.

b. The command, claimant or support agency which procures equipment for installation at a specific activity normally funds the cost of equipment installation.

### **5.2.3. Submission Requirements**

Procedures for the submission of equipment installation projects are contained in chapter 2.

## Part 3. TELEPHONE EQUIPMENT

### 5.3.1. Telephone Equipment

#### a. Navy-owned Telephone Equipment

(1) Telephone instruments and switch gear for new and existing facilities are normally funded from other than MILCON appropriations. Interior cables, ducting, terminals, and wiring for these instruments are funded by MILCON. The Naval Computer and Telecommunications Command (COMNAVCOMTELCOM) has policy and functional responsibility of Navy base administrative telecommunications systems (see OPNAVINST 2060.8).

(2) Installation of interior telephone equipment may be funded as procurement or from operating accounts in new and existing facilities. Structural work in new and existing facilities is classified as construction. Installation of building conduits, ducts, cabling, switches, raceways, support structures, risers, telephone closets, and switch rooms to support telecommunications systems are construction costs.

(3) The day-to-day equipment replacements, minor equipment rearrangements, and installations within the purview of the commanding officer of an activity, which do not require approval of higher authority, are normally funded from local operation and maintenance accounts.

(4) Procurement and installation of telephone central office (exchange) equipment shall be funded from procurement appropriations according to the investment and expense criteria. In new telephone central office (exchange) facilities funded with MILCON, this equipment may be funded from the MILCON appropriation.

(5) The cost of relocating telephone equipment from an existing central office to a new or enlarged facility is funded with operational accounts by the activity or major claimant.

#### b. Navy-Owned Exterior Telephone Facilities.

(1) The acquisition and installation of Navy-owned outside telephone lines (cable, ducts, poles, manholes, etc.), from the building terminals to the telephone central office (exchange), is classified a construction cost. The cost of installing common

ducts, poles, manholes, etc., for telephone and electrical distribution lines will be funded as construction.

(2) Funding for the procurement and installation of exterior cable not owned by the Navy will be from other than MILCON appropriations. Maintenance and repair/replacement of existing telephone cable and equipment is funded using operational accounts (per FMB Manual, Volume 2).

## Chapter 6 CONSTRUCTION

### Part 1. GENERAL INFORMATION

#### 6.1.1. Definitions

a. Construction. Construction is the erection, installation, or assembly of a new real property facility; or the addition, expansion, extension, alteration, conversion, or replacement of an existing real property facility; or the relocation of a real property facility. Construction projects include the demolition of facilities to be replaced, supporting utilities, roads, parking lots, equipment installed in and made a part of such facilities, related site preparation, excavation, filling and landscaping, or other land improvements incident to the project. The provisions of this manual also apply to non-capitalized undertakings at DBOF activities. Non-capitalized undertakings are expenditures for alterations (construction) that do not enhance the plant value of the real property facility. The installation of cathodic protection during the construction of a new real property facility, or during the conversion, addition, expansion, or complete replacement of a real property facility shall be accomplished as construction.

b. Conversion. A conversion is a major structural revision of a real property facility which changes its original functional purpose resulting in a change to the facility's current 3-digit basic category code (DODINST 4165.3 and NAVFAC P-72). Repair or maintenance may be funded as a non-construction cost when included in a conversion project.

c. Addition, expansion, extension. Addition, expansion, and extension each constitute a physical increase to a real property facility. As a general rule, if the dimensions used to record the facility in inventory are increased, then an addition, expansion, or extension has occurred. Modernization that increases production capability; enlarges, extends, or expands primary

distribution systems; or provides services for a new purpose is construction.

d. Replacement. A replacement is a complete reconstruction of a real property facility destroyed or damaged beyond economical repair. A construction project for complete replacement must include the cost of demolition of the replaced facility (see also paragraph **3.1.2f**). Replacement or a major reconstruction, such as the removal of a deteriorated building and erection of a new building on an existing foundation, are construction and not repair, except for utility plant buildings that are part of the utility system (see paragraph **3.1.3g**).

e. Alteration. An alteration is the work required to adjust interior arrangements or other physical characteristics of an existing real property facility so that it may be more effectively adapted to or utilized for its designated purpose. Alteration is classified as construction.

f. Minor Construction Project

(1) Claimant or locally funded. A claimant or locally funded minor construction project is a single undertaking with a funded cost of \$300,000 or less (including contract administration or SIOH) at a military installation. The project shall include all work necessary to produce a complete and usable facility, or a complete and usable improvement to an existing facility. All minor construction projects for an addition, expansion, extension or alteration must be supported by the Navy Shore Facilities Planning System (SFPS) (see **NAVFACINST 11010.44**).

(2) Unspecified Minor Construction. An unspecified minor construction project is defined as a single undertaking in excess of \$300,000 at a military installation that includes all urgent construction necessary to produce a complete and usable facility, or a complete and usable improvement to an existing facility. The maximum amount currently specified by law as for an unspecified minor military construction project is currently \$1,500,000, and such projects are funded from the military construction appropriations. See also paragraphs **6.2.1b** and **6.4.4**.

g. Exceptional Construction Authorities. The Exceptional Construction Authorities (see [part 4](#) of this chapter) are those authorities which are available to obtain authorization and funding outside the normal annual MILCON programming and budgeting process for construction projects. The authorities include (1) Unspecified Minor Construction costing more than \$300,000, (2) Emergency Construction, (3) Major Restoration or Replacement of Damaged Facilities, and (4) Contingency Construction.

h. Installed Equipment

(1) Installed equipment, sometimes called "built-in equipment," is accessory equipment and furnishings that are not intended to be movable, are required for operation, and are permanently affixed as a part of the real property facility. The equipment is engineered and built into the facility as an integral part of the final design. Equipment of this nature is considered part of the Class 2 real property facility, and is funded as construction. Examples of installed equipment are listed below (see FMB Manual, paragraph 036104):

- (a) Built-in furniture, cabinets, and shelving.
- (b) Venetian blinds and shades.
- (c) Window screens and screen doors.
- (d) Elevators and escalators.
- (e) Telephones, fire alarms, and intercommunication systems and equipment (built-in) (see paragraph [5.3.1](#)).
- (f) Raised flooring.
- (g) Pneumatic tube systems.
- (h) Heating, ventilating, and air conditioning installations. (except when provided solely to support a piece of personal property.)
- (i) Electric generators and auxiliary gear, including uninterruptible power supply (UPS), in support of a real property facility electrical system.
- (j) Waste disposers, such as incinerators.
- (k) Built-in food preparation and serving equipment.
- (l) Dishwashers (not movable).
- (m) Hoods and vents.



- (n) Refrigerators (built-in).
- (o) Laboratory furniture (built-in).
- (p) Cranes and hoists (built-in, not movable). Built-in rails for movable cranes.
- (q) Chapel pews and pulpits.
- (r) Theater seats.
- (s) Automated storage/retrieval systems (including wire guided fork lifts.)

(2) The costs of all items of equipment (personal property), including furniture and furnishings, which are loose, portable, or can be easily detached from the structure, are normally excluded from the real property costs. In addition, the costs of permanently attached equipment such as technical, medical, scientific, production, and processing equipment which is usually procured as personal property, are also normally excluded from the real property costs. Production and other movable equipment funded from other appropriations should be included as additional information in presenting construction projects. Examples of excluded equipment include the following:

- (a) Loose furniture.
- (b) Loose furnishings, including rugs.
- (c) Filing cabinets and portable safes.
- (d) Portable office machines.
- (e) Plug-in wall clocks.
- (f) Portable food preparation and serving equipment, including appliances.
- (g) Training aids and equipment, including simulators.
- (h) Shop equipment.
- (i) Automatic data processing equipment.
- (j) Portable photographic equipment.
- (k) Electric generators and UPS in support of personal property equipment.
- (l) Movable cranes and hoists excluding built-in rails. (Movable cranes in new facilities are not funded from MILCON.)
- (m) Any operational equipment for which installation mounting and connections are provided in building design and which are detachable without damage to the building or equipment.

## Part 2. CONSTRUCTION PROJECT SCOPE

### 6.2.1. Construction Incrementation

a. No project may be subdivided for reasons of circumventing programming and approval requirements. Each project must result in a complete and usable real property facility, or complete and usable improvement to an existing facility. The planned (foreseeable) acquisition of, or improvement to, a real property facility through a series of minor construction projects is prohibited. Minor construction work which will involve multiple facilities in support of the same mission change, or in support of a single new mission element, must be treated as follows:

(1) Where the multiple facilities involved are all the same category code, the work must be incorporated into a single scope.

For example, if 24 magazines at an installation must undergo alterations in connection with a new ordnance handling mission, this work would be accomplished as a single project.

(2) Where the multiple facilities involved are different category codes, the work will generally be incorporated into a single scope, unless it can be demonstrated that the work in each facility:

(a) is for unrelated and dissimilar purposes,

(b) is not dependent on each other, and

(c) will result in each being a complete and usable facility or a complete and usable improvement to a facility.

b. Incrementation constraints have been modified by Congress to permit using minor construction projects to precede or follow a major construction project. Use of either Unspecified Minor Construction, or activity or claimant funded minor construction, to satisfy urgent requirements preceding a MILCON project is permitted when such minor construction would provide a complete and usable facility during a specific time frame. Use of a minor construction project following a MILCON project is permitted when a requirement develops after the Beneficial Occupancy Date (BOD) of the MILCON project. In either case, the appropriate committees of Congress must be notified of such undertaking for projects greater than \$300,000.

c. Work identified during the execution of a MILCON project (i.e.: before BOD), and needed for a complete and usable facility, or desired for supporting the same mission as intended in the MILCON project, must be funded by seeking additional MILCON funds or inclusion in a later MILCON project.

d. Work removed from the originally approved MILCON scope and deferred for later accomplishment with a minor construction project may only proceed after BOD of the original project and expiration of the original MILCON appropriation.

e. A complete and usable facility may require extensions or improvements to other supporting facilities, such as exterior electrical, water, and sewage distribution systems, parking lots, and fencing. Exterior utility modifications must be included in the construction project scope, except in cases where central utility modifications are required to support several new facilities or upgrades in more than one facility.

f. Actions that are prohibited:

(1) Splitting a project scope solely to avoid an approval requirement, or to circumvent the statutory limitation on funding minor construction with an other than MILCON appropriation, e.g.: splitting the air conditioning of a building into increments, each costing less than \$300,000.

(2) Splitting a requirement when it may result in a higher cost of construction because of the sacrifice of economy of scale. For example, construction of multiple small buildings, each under \$300,000, instead of a single, more economical building.

(3) Concurrent work on an active military construction project to avoid MILCON reprogramming approval procedures. For example, using O&MN funds to augment a project to prevent MILCON expenditures from exceeding either 125 percent of the originally appropriated amount, or \$1.5 million greater than the originally appropriated amount.

g. In the event a project is composed of work which is so integrated as to preclude separation of construction and repair costs, and the total funded cost of construction and repair

exceeds \$300,000, the combined construction and repair project shall be accomplished as a MILCON project.

### **6.2.2. Combining Appropriated and Private or Non-appropriated Funds (NAF)**

a. Appropriated funds should not be combined with private or non-appropriated funds for the same minor construction project. This practice may be considered incrementation and subdivision to circumvent statutory limitations. Exceptions to this policy must be approved in advance by the Secretary of the Navy or his/her designee. Request for exceptions to this policy shall be submitted to CNO(N44D), via the major claimant and the chain of command, for processing to ASN(I&E) for approval.

b. Private or non-appropriated funds may be used to purchase and install furnishings, equipment, and interior finishes for private and non-appropriated fund facilities. Mixing of appropriated and private or non-appropriated funds for repair or maintenance projects is allowed.

c. NAF facilities, or portions thereof, may be eligible for appropriated funding when the project requirement or siting is driven primarily by the activity master plan or other facilities issues that are otherwise not related to the NAF facilities

d. Appropriated funds, normally not allowed for construction of revenue generating facilities, may be used only in those instances authorized by the funding policy outlined in FMB Manual, Volume 7, paragraphs 075530 and 075531. Exceptions to this policy are approved by ASN(I&E) in coordination with the Assistant Secretary of the Navy (Manpower & Reserve Affairs) (ASN(M&RA)). Request for approval should be submitted to the Bureau of Personnel (BUPERS) or the Naval Exchange Service Command (NEXCOM), via the major claimant, for processing to ASN(I&E) (see SECNAVINST 7000.23).

e. Additional information on non-appropriated fund projects is provided in part 2 of chapter 7.

### **6.2.3. Multiple Minor Construction Projects in the Same Real Property Facility**

Multiple minor construction projects in an existing single facility may be allowed when they are: (1) for unrelated and dissimilar purposes, (2) not dependent on each other, (3) not

contiguous (not touching), and (4) each one will result in a complete and usable improvement to the facility (see paragraph 6.2.1a.).

### **Part 3. CONSTRUCTION IN OTHER THAN NAVY-OWNED FACILITIES**

#### **6.3.1. Construction in General Services Administration-Owned, -Managed or -Controlled Facilities**

Under the general provisions in the annual appropriations for the General Services Administration (GSA), Navy appropriations available for operations and maintenance may be used for reimbursement to the GSA for the expenses of renovation and alteration of buildings and facilities. Therefore, projects involving alterations to Navy-occupied, GSA-owned, managed, or controlled facilities shall be authorized and funded by the major claimant or the Navy activity requiring the work. The GSA is responsible for work that a tenant can normally expect from a landlord. The Navy is responsible for work which cannot be normally expected from a landlord and which is strictly peculiar to the needs of the Navy. When Navy appropriations are used to fund construction (including alterations) or repair of GSA-owned, managed, or controlled facilities, the provisions of this manual apply. Operation and maintenance funds shall not be used for work in GSA-owned, managed, or controlled facilities that would otherwise require Military Construction appropriation funding. For the purposes of these provisions, industrial funds are considered similar to appropriations available for operations and maintenance. The above policy is also applicable to non-GSA administered facilities leased by the Navy which are subject to the provisions of NAVFAC P-73, "Real Estate Procedural Manual."

### **Part 4. CONSTRUCTION PROGRAMMING**

#### **6.4.1. Annual Military Construction Program**

a. The Defense Authorization Act and annual Military Construction (MILCON) Appropriation provide authorization and funds for individual construction projects developed under the Naval Shore Facilities Planning System (SFPS) (see **NAVFACINST**

**11010.44**), and supported by an installation Facilities Requirements Plan (FRP). This annual program is normally restricted to construction projects exceeding \$300,000 in funded construction costs, and to projects for acquisition of real estate (Class 1, property) with individual costs exceeding \$100,000. Real property facilities will not be maintained, repaired, or constructed with procurement appropriations unless specifically approved by Congress in the program appropriation language.

b. Construction projects with funded costs exceeding \$300,000 must be included in the annual MILCON program. Exceptions are those projects which qualify under one of the following exceptional construction authorities:

- (1) Emergency Construction (see paragraph **6.4.2**).
- (2) Major Restoration or Replacement of Damaged Facilities (see paragraph **6.4.3**).
- (3) Unspecified Minor Construction (see paragraph **6.4.4**).
- (4) Secretary of Defense MILCON Contingency Authority (see paragraph **6.4.5**).

c. The Secretary of the Navy may approve up to the lesser of 125 percent of the originally appropriated amount or \$1.5 million greater than the originally appropriated amount, when the increase is for the sole purpose of meeting unusual variations in cost that could not have been reasonably anticipated at the time the project was approved by Congress.

d. Refer to **NAVFACINST 11010.44** for MILCON project submission procedures and documentation requirements.

## **6.4.2. Emergency Construction**

a. Authority. Title 10 U.S.C., Section 2803 provides emergency authority for accomplishing military construction projects outside of those line items included in the annual Defense Authorization Act. Normally, use of this authority is restricted to projects costing more than \$1,500,000. The total authorization available to the Navy for this purpose in any fiscal year is \$30,000,000. For each project, the Secretary of the Navy must determine that the requirement is: (1) vital to the national security or to the protection of health, safety, or the quality of

the environment, and (2) so urgent that deferring authorization for construction to the next Defense Authorization Act would be inconsistent with national security or the protection of health, safety, or environmental quality.

b. Funding. Annual MILCON Appropriation Acts do not provide funds for projects approved under the authority of 10 U.S.C. 2803.

Projects must be financed by reprogramming military construction fund savings resulting from favorable contract awards, or by deferral or cancellation of other projects that have been authorized and funded in a MILCON program.

c. Submission Procedures. Project documentation should be prepared on DD 1391 per **NAVFACINST 11010.44**, and submitted to the ASN(I&E) via the chain of command, the local EFD or EFA, COMNAVFACENGCOM and CNO(N44). An advance copy should be provided to COMNAVFACENGCOM. Each project approved by ASN(I&E) then requires a 21-day congressional notification period.

#### **6.4.3. Major Restoration or Replacement of Damaged Facilities**

a. Authority. Under the authority of 10 U.S.C. 2854, certain damaged or destroyed facilities may be repaired, restored, or replaced using military construction appropriations funds when the funded

project cost exceeds \$1,500,000. The Secretary of Defense has restricted use of this authority to complete replacement or "major restoration" of a facility which is urgently required. Major restoration of damaged facilities is defined as a restoration costing in excess of 50 percent of the cost of completely replacing the facility. In those cases where the timing is such that restoration or replacement will not unduly impair mission, or when urgency cannot be otherwise justified, projects should be included in the annual budget program. A major restoration or complete replacement of a damaged facility that can be supported as an exigent requirement can be funded as Unspecified Minor Construction under 10 U.S.C. 2805 when the funded project cost is between \$300,000 and \$1,500,000, providing it meets the requirements of paragraph 6.4.4. Exigent projects with a funded

cost of \$300,000 or less may be undertaken and funded by the major claimant or local activity.

b. Funding. Military construction funds are not provided by this authority. Reprogramming similar to the procedures outlined for emergency construction is required.

c. Submission Procedures. Project documentation is prepared on DD 1391 per **NAVFACINST 11010.44** and submitted to ASN(I&E) via the chain of command, the local EFD or EFA, COMNAVFACENGCOM and CNO(N44). An advance copy should be provided to COMNAVFACENGCOM.

Each project approved by ASN(I&E) requires a 21 day congressional notification time period.

#### **6.4.4. Unspecified Minor Construction**

a. Authority. Title 10 U.S.C. 2805 contains the authority for construction projects not otherwise authorized by law with a funded project cost less than \$1,500,000 (see paragraph **6.1.1f**). Projects solely for the acquisition of real estate (Class 1, property) do not qualify under this authority (see NAVFAC P-73, Real Estate Procedural Manual). Unspecified Minor Construction includes projects costing more than \$300,000 and less than \$1,500,000 which are identified too late to be included in the current budget submission, and which can not be deferred to the next regular MILCON program because there is no feasible alternate, interim, or other permanent method of satisfying the facilities requirements. Accurate and supportable cost estimates and certifications are required to preserve the credibility of the Navy's Unspecified Minor Construction (UMC) program with DoD and the Congress.

b. Funding. Annual MILCON legislation provides lump-sum authorizations and appropriations for UMC. Assignment of MILCON funds for minor construction projects is under the control of the Chief of Naval Operations. Minor construction projects with a cost greater than \$300,000 and affecting Category Code 500, medical facilities, are funded by the Defense Medical Facilities Office (DMFO).



c. Eligibility Criteria. As there are many more projects proposed than are possible to fund, the following criteria are used to screen projects:

(1) A new primary mission assignment cannot be carried out without the requested construction.

(2) Unexpected growth in existing primary missions cannot be accommodated without the requested construction.

(3) Unexpectedly rapid progress in a high priority research and development effort cannot be exploited without the requested construction.

(4) A hazard to life and property meeting the Occupational Safety and Health Act, Category IA, cannot be corrected without the requested construction.

(5) The requested construction is necessary to conform to regulatory or statutory requirements to continue performing primary missions.

(6) Unexpected new items of major equipment, which are necessary for the performance of a primary mission, cannot be put into operation without the requested construction.

(7) The security of nuclear or other classified special weapons or materials would be jeopardized without the requested construction.

(8) The requested construction consists of essential alterations incident to repairs (funded from other than MILCON) immediately necessary to continue performing current primary missions. The purpose being served must be the restoration of the facility to allow continued use for its designed purpose. Restorations for a different purpose does not meet this qualification. To qualify as UMC, the alterations must not exceed 50 percent of the associated repairs.

(9) Unexpected loss or severe reduction in supporting utility sources or systems will jeopardize the ability to continue to perform primary missions without the requested construction.

(10) The requested construction is a self-amortizing minor construction project, provided the construction will, within 3 years following completion of the project, result in savings in maintenance and operating costs in excess of the cost of the

project. The computation of savings must compare present and proposed total systems investment cost, and not just the cost of the added facilities. Current instructions on 3-year payback projects should be used as guidelines in preparing payback analysis for projects submitted under this criteria (see DODINST 7041.3 and NAVFAC P-442).

d. Submission Procedure. Project documentation should be prepared on DD 1391 per **NAVFACINST 11010.44** and submitted to ASN(I&E), via the chain of command, the local EFD or EFA, COMNAVFACENGCOM, and CNO(N44). CNO(N44) may approve projects less than \$500,000. An advance copy should be provided to COMNAVFACENGCOM. Each project approved by ASN(I&E) or CNO then requires a 21-day congressional notification.

#### 6.4.5. Contingency Construction

a. Authority. DoD Directive 4270.36 implements 10 U.S.C. 2804 and 2808, which provides the Secretary of Defense with authority to establish or develop installations or facilities which he determines to be critical to the security of the United States. This authority encompasses a situation in which a declaration of war or national emergency (hostile situation) exists, or the need for construction of military facilities is critical to the security of the United States and cannot await inclusion in a later annual MILCON Authorization Act.

b. Funding. This authority differs from Emergency Construction in that Congress appropriates, in advance, a lump sum amount of MILCON funds for a known contingency, such as the establishing of new bases in support of rapid deployment forces.

c. Submission Procedure. Project documentation should be prepared on DD 1391 per **NAVFACINST 11010.44** and submitted to the CNO(N44) via the chain of command, the local EFD or EFA, and COMNAVFACENGCOM. CNO(N44) will seek the required approvals by ASN(I&E) and DoD. An advance copy should be provided to COMNAVFACENGCOM. Each project approved then requires an additional 21-day Congressional notification time period.

#### **6.4.6. Non-MILCON Funded Minor Construction**

a. Authority. The maximum specific approval authority limits for active shore activities, DBOF activities, and reserve activities are listed in appendix B. This authority may be reduced by the major claimant.

b. Funding. Funds for claimant or locally funded minor construction projects are budgeted in the operations and maintenance appropriations, or from self-generated funds at DBOF activities. Generally, real property facilities that are not required to satisfy the approved FRP should not be programmed.

c. Submission Procedures. Detailed project documentation, submission, and review requirements are contained in chapter 2.

## Chapter 7

# OTHER TYPES OF PROJECTS

### Part 1. PROJECTS FOR RESTRICTED FACILITIES, SHELTERS, AND RELOCATABLE FACILITIES

#### 7.1.1. Restricted Projects

The following types of restricted projects require endorsement by COMNAVFACENGCOM or the major claimant prior to funding. When a project scope involves such work, it shall be in accordance with applicable regulations, and the projects shall be clearly identified so that designated approval authorities may take appropriate action.

a. Storage and warehousing facilities. Projects for acquisition, conversion, expansion, disposal, or diversions to other uses of storage and warehousing facilities shall be given special consideration. Maximum use shall be made of such facilities that are available to the Department of Defense as a whole. When a project for additional space is proposed, the major claimant validation shall affirm whether or not this requirement is substantiated by an approved Facility Requirements Plan (FRP) for the activity involved. If not so substantiated, the activity must take concurrent action in accordance with OPNAVINST 11000.16 and **NAVFACINST 11010.44**, to change its FRP. All actions in connection with storage and warehousing facilities, regardless of area involved, are subject to procedures specified in NAVSUPINST 4450.21A. Diversion of covered storage spaces at an installation during 1 fiscal year shall be approved as follows:

- (1) Major claimant, if less than 10,000 gross square feet.
- (2) COMNAVFACENGCOM (via the major claimant and servicing engineering field division), if between 10,000 and 40,000 gross square feet.
- (3) DoD (via the major claimant, servicing engineering field division, and COMNAVFACENGCOM), if over 40,000 gross square feet.

b. Projects involving special site approval procedures. All projects involving ammunition and explosives, concerns for electromagnetic radiation, and airfield safety must be reviewed and certified by the office having cognizance over the applicable safety criteria. DODINST 6055.9 and **NAVFACINST 11010.44**, chapter 10, outline procedures for requesting and obtaining site approvals, including:

(1) general requirements and responsibilities for review and approval of facility sites,

(2) procedures for submitting data to the EFD/EFA for use in obtaining site approvals,

(3) documentation required to substantiate and justify a site approval request, and

(4) a requirement for documentation of site approval status for safety certification.

### **7.1.2. Protective Shelters**

Certain circumstances, particularly requirements related to production and RDT&E operations, necessitate the erection of temporary shelters. The cost of procurement and erection shall be an equipment (personal property) cost, not a construction cost, when the following conditions are satisfied:

a. The shelter is to be made of prefabricated wall and roof panels that are easily assembled and readily removed,

b. The erection will be upon an existing slab where no new foundation will be required,

c. All utilities connections will be temporary, and

d. The shelter will not remain in continuous use in any one location for more than 12 months.

### **7.1.3. Relocatable Facilities**

a. The cost of a relocatable building for an interim requirement may be an unfunded project cost under the following restrictive conditions (DODINST 4165.56 and OPNAVINST 11010.33):

(1) The building is designed for the specific purpose of being readily moved, erected, disassembled, stored, and reused. This includes all types of buildings designed to be relocatable.

(2) The estimated cost for the building disassembly, repackaging (including normal repair and refurbishment of components), and for nonrecoverable building components, such as foundations, do not exceed 20 percent of the building acquisition cost.

(3) The building is for an interim facility requirement, normally 3 years or less, resulting from either transitory peak military missions, deployments, military contingency operations, disaster relief requirements, or to satisfy urgent requirements pending approval and construction of facilities via normal military construction or special project programs.

(4) Specifically excluded from this definition are building types or forms provided as an integral part of a mobile equipment item and that are incidental portions of such equipment components, such as communications vans or trailers.

b. Criteria for relocatable facility projects include the following:

(1) Except as modified in this paragraph, procedures for preparation and submission specified in this manual apply.

(2) Project cost. Funded and unfunded project cost guidance (paragraphs 2.1.1e and 2.1.1f) apply, except as follows:

(a) The cost of relocatable buildings is an unfunded cost. Such buildings shall be considered personal property unless these facilities are authorized for procurement using construction procedures. In this case, the buildings shall be accounted for as real property.

(b) Site preparation, foundations, exterior utilities, and other supporting construction requirements are funded costs.

(c) The costs for packaging and transporting relocatable buildings are unfunded costs.

(d) The cost of erection of the relocatable building is an unfunded project cost.

(3) Approval to use relocatable facilities must be obtained from the major claimant.

## **Part 2. NONAPPROPRIATED FUND PROJECTS**

### **7.2.1. Policy**

a. Provision of Facilities. It is Department of the Navy policy to provide, maintain, and operate adequate facilities to accommodate a well-rounded morale, welfare, and recreational program to ensure the mental and physical well-being of Navy and Marine Corps military and civilian personnel. The morale, welfare, and recreation program includes the exchange and lodge programs. In consonance with this policy, adequate spaces, facilities, and structures should be provided through appropriated or non-appropriated funds (NAF). It is a basic responsibility of installation commanding officers and command and support agencies to ensure that proper recognition is given to morale, welfare, and recreational facilities in the development of Real Property Maintenance and Military Construction Programs. For additional guidance on use of non-appropriated and appropriated funds see SECNAVINST 7000.23, SECNAVINST 11013.29, and FMB Manual, Volume 7.

b. Non-appropriated Fund Project Review. Except as modified in this chapter, facilities projects funded from NAF shall comply with the requirements of this instruction and shall be subjected to the same technical reviews and approvals within the Department of the Navy.

NAF projects can, however, be built to meet commercial standards.

### **7.2.2. Funding Sources**

Non-appropriated funding in support of morale, welfare, and recreation facilities may be derived, with proper approval, from any of the following sources:

- a. Local activity NAF Retained Earnings Account.
- b. Claimant NAF Capital Subsidy Account.
- c. MWR/NEX Board of Directors Central Funds.
- d. Navy Lodge Retained Earnings (Navy Lodges only).
- e. DeCA Surcharge Funds (Commissaries Only).

Use of appropriated funds to construct or modify revenue generating facilities is restricted to specific instances as per paragraphs 6.2.2c and d.

### 7.2.3. Submission Procedures, Format, and Approval Authority

Submission procedures, format, and approval of construction projects shall be in accordance with this instruction, and instructions and regulations issued by the Bureau of Naval Personnel and the Navy Exchange, as appropriate (see NAVFACINST 11010.69). See paragraph 6.2.2 for combining appropriated funds with private or NAF. Non-appropriated funded project approval authorities are as follows: the major claimant may reduce the activity approval limits shown:

#### Classification of Work

Approval Authority	Repair	Construction
Activity	200K *	\$200K *
MWR/NEX Bd Of Dir	>\$200K	>\$200K **
OSD	N/A	\$500K **
Congress	N/A	>\$500K **

\*Unless a lower limit established by major claimant.

\*\*All construction projects over \$200,000 are approved by the MWR/NEX Board of Directors (see OPNAVINST 1700.14). Additionally, NAF construction projects costing between \$200,000 and \$500,000 must be submitted to DoD and construction projects costing over \$500,000 submitted to Congress for approval.

### 7.2.4. Projects in International Balance of Payments (IBOP) Areas (DODINSTs 7060.2 and 7060.3)

a. Non-appropriated fund construction projects in IBOP areas shall be considered justified for approval only in cases where:

- (1) A serious deficiency exists in morale and welfare facilities at isolated locations, or
- (2) Such projects would clearly contribute to improvement in United States balance of payments by diverting expenditures from the local economy.

b. Non-appropriated fund construction, repair, and



maintenance projects outside the United States will be, to the maximum extent possible, accomplished under procedures which use:

(1) U.S. contractors, U.S. materials, and end products from domestic suppliers;

(2) U.S. government-furnished material and equipment;

(3) U.S. flag carriers;

(4) Prefabricated installations and structures manufactured in the United States; and

(5) Competent, available military labor.

IBOP evaluations shall be included in the cost estimate prior to contract award (see paragraph **2.2.9c**).

## **APPENDIX A**

### **REFERENCES**

#### Department of Defense Directives and Instructions

1. DoD Instruction 4165.3 of 24 October 1978 with Ch. 1 (NOTAL), establishes uniform facility classes and construction categories (DoD Real Property Category Codes). NAVFAC P-72 implements.
2. DoD Instruction 4165.56 of 13 April 1988 (NOTAL) establishes procedures for authorization, acquisition, utilization, and disposition of relocatable buildings. OPNAVINST 11010.33B (NOTAL) implements.
3. DoD Directive 4270.36 of 16 May 1991 (NOTAL) prescribes policy guidance for the planning, programming, and budgeting of projects for minor construction and restoration or replacement of damaged facilities.
4. DoD Directive 6055.9 of 25 November 1983 with Ch. 1 (NOTAL), establishes procedural and documentation requirements for site approval submission to the Department of Defense Explosive Safety Board (DDESB) for projects involving explosives safety criteria.
5. DoD Instruction 7041.3 of 7 November 1995 (NOTAL) provides guidance for preparation of economic analysis of proposed DoD investments.
6. DoD Instruction 7045.7 of 23 May 1984 (NOTAL) provides guidance on the Planning, Programming and Budgeting System (PPBS). SECNAVINST 5000.16E (NOTAL) implements.
7. DoD Instruction 7060.2 of 16 January 1969 with Chs. 1 and 2 (NOTAL), establishes policies for International Balance of Payments Program-Accounting, Reporting, and Estimating. FMBINST 7020.10E (NOTAL) implements.
8. DoD Directive 7060.3 of 9 March 1979 with Ch. 1 (NOTAL), establishes policies and procedures governing construction in foreign countries for non-appropriated fund activities. BUPERSINST 7010.7C (NOTAL), paragraphs 15951 and 15869A and NAVSUPINST 11107.4A (NOTAL), 4205.20A (NOTAL) and 4230.14 (NOTAL) implements.

Secretary of the Navy Instructions

1. 7000.23A of 13 February 1986 (NOTAL) provides policy and guidance for the funding of Morale, Welfare, and Recreation (MWR) programs and activities. Implements DoD Directive 1015.6 (NOTAL).
2. 11013.29C of 20 September 1983 (NOTAL) transmits DoD Instruction 7700.18 on the review and reporting procedures for non-appropriated and privately funded construction projects.

Chief of Naval Operations Instructions

1. 2060.8 of 29 March 1985 (NOTAL) provides guidance on the management and business administration of DoD telephone systems and base telecommunication services within the Navy.
2. 3501.167B of 13 May 1987 with Chs. 1 and 2 (NOTAL), establishes the procedures and responsibilities for implementation of the Shore Base Readiness Reporting (BASEREP) system.
3. 5090.1B of 1 Nov 1994 (NOTAL), provides criteria and guidance for Navy environmental, natural resources, and pollution abatement programs.
4. 5100.23D of 11 October 1994 (NOTAL), provides the Navy Occupational Safety and Health (NAVOSH) Program.
5. 11000.8H of 30 July 1990 (NOTAL) establishes policy and responsibilities for the development and execution of local Self-Help programs within the Navy.
6. 11000.16A of 28 April 1987 (NOTAL) establishes policies, responsibilities, and procedures for Navy-controlled land and shore facilities.
7. 11010.33B of 14 July 1988 (NOTAL) implements Department of Defense (DoD) guidance for the acquisition and use of relocatable buildings.
8. 11010.34B of 11 February 1987 with Chs 1 and 2 (NOTAL), provides guidelines for the preparation of the Annual Inspection Summary, Type "A".

Naval Facilities Engineering Command Instructions

1. 7820.1H of 21 September 1995 (NOTAL) defines policy for financing operating costs at Engineering Field Divisions and Officer in Charge of Construction activities.

2. 11010.44E of 15 December 1987 (NOTAL) provides guidance for shore facilities planning and preparation of documents in support of MILCON and NAF projects, and site approvals.
3. 11010.69 of 24 January 1983 (NOTAL) establishes procedures and guidance for administration of design and construction of centrally-managed NAF projects.
4. 11012.145D of 15 November 1988 (NOTAL) issues Dam and Earthquake safety requirements within the Navy.

#### Other Instructions

1. NAVSUPINST 4450.21A of 15 June 1978 (NOTAL) provides definitive instructions covering the control and utilization of storage facilities at Navy shore activities.
2. Navy Comptroller Manual (NOTAL) provides policy and guidance regarding appropriation, cost and property accounting (field).

#### Naval Facilities Engineering Command Publications

1. P-72 Department of the Navy Facility Category Codes (NOTAL).
2. P-73 Real Estate Procedural Manual (NOTAL).
3. P-80 Facility Planning Criteria for Navy and Marine Corps Installations (NOTAL).
4. P-164 Real Property Data - Detailed Inventory of Navy Shore Activities (NOTAL).
5. P-442 Economic Analysis Handbook (NOTAL).
6. Military Handbook 1010/1 of 30 September 1988 (NOTAL) - Provides guidance, procedure, and examples for cost estimate preparation and review. Supersedes DM-10, "Cost Engineering Criteria and Cost Data."

## **APPENDIX B**

### **SUMMARY OF AUTHORITY LIMITS**

TABLE 1: Regular Shore Activities

TABLE 2: DBOF Activities

TABLE 3: Reserve Activities

TABLE 1  
Active Shore Activities (O&MN, RDTE, Procurement)

Category of Work	Cost Limits	Approval Request		Approval Authority	Funds Sources
		To	Via		
1. Maintenance					
(a) Recurring	None	None		C.O.	Activity
(b) Specific	\$0 - \$1 Million	None		C.O.	Activity
(footnotes 1 & 2)	Over \$1 Million	Major Claimant		Major Claimant	Major Claimant
2. Repair					
(a) General	\$0 - \$1 Million	None		C.O.	Activity
(footnotes 1 & 2)	\$1M to \$5M	Major Claimant		Major Claimant	Major Claimant
	Over \$5 Million	CNO (N44D)	Major Claimant	ASN (I&E)	Major Claimant
(b) Over 50% of plant value	Over \$500K	Major Claimant		Major Claimant	Activity or Major Claimant
3. Construction (footnotes 1 & 2)	\$0 - \$300K (footnote 3)	None		C.O. or Major Claimant	Activity or Major Claimant
	\$300K to \$500K	CNO (N44)	(a) EFD (b) Major Claimant (c) NAVFAC	CNO	CNO - MCON
	\$500K to \$1.5M (footnote 3)	CNO (N44)	(a) EFD (b) Major Claimant (c) NAVFAC	ASN (I&E)	CNO - MCON
	Over \$1.5M	CNO (N44)	(a) EFD (b) Major Claimant (c) NAVFAC	Congress	CNO - MCON
4. Equipment Installation (footnotes 1, 2, 4, 5, 6, & 7)	\$0 to \$200K	None		C.O.	Activity, Major Claimant or Support Agency
	Over \$200K	Major Claimant		Major Claimant	

## Footnotes:

- (1) Major claimants may set C.O. approval limits below those shown on this table.
- (2) Documentation is required for repair or maintenance projects over \$500,000, minor construction projects over \$200,000, and combination projects over \$300,000, unless lower limit for documentation set by major claimant.
- (3) Cost limit is \$1.0M (\$3.0M for MCON) for construction project solely to correct life-, health-, or safety-threatening deficiency.
- (4) Support Agency is the major claimant or agency funding the procurement of the equipment. Equipment installation is funded by the Support Agency if also funding the procurement of the equipment.
- (5) Equipment installation in new construction and additions is funded as construction.
- (6) Equipment installation project costs do not include the cost of the equipment and are funded with the same funds source used to procure the equipment.
- (7) Documentation is required for equipment installation projects over \$200,000.

TABLE 2  
Defense Business Operations Fund Activities (DBOF)

Category of Work	Cost Limits	Approval Request		Approval Authority	Funds Sources
		To	Via		
1. Maintenance					
(a) Recurring	None	None		C.O.	Activity
(b) Specific	\$0 - \$3 Million	None		C.O.	Activity
(footnotes 1 & 2)	Over \$3 Million	Major Claimant		Major Claimant	Activity
2. Repair					
(a) General	\$0 - \$3 Million	None		C.O.	Activity
(footnotes 1 & 2)	\$3M to \$5M	Major Claimant		Major Claimant	Activity
	Over \$5 Million	CNO(N44D)	Major Claimant	ASN (I&E)	Activity
(b) Over 50% of plant value	Over \$500K	Major Claimant		Major Claimant	Activity
3. Construction (footnotes 1, 2, & 4)	\$0 - \$300K (footnote 3)	None		C.O.	Activity (Over \$100K - CPP)
	\$300K to \$500K	CNO(N44)	(a) EFD (b) Major Claimant (c) NAVFAC	CNO	CNO - MCON
	\$500K to \$1.5M (footnote 3)	CNO(N44)	(a) EFD (b) Major Claimant (c) NAVFAC	ASN(I&E)	CNO - MCON
	Over \$1.5M	CNO(N44)	(a) EFD (b) Major Claimant (c) NAVFAC	Congress	CNO - MCON
4. Equipment Installation (footnotes 1, 2, 4, 5, 6, 7, & 8)	\$0 to \$200K	None		C.O.	Activity (Over \$100K - CPP) or
	Over \$200K	Major Claimant		Major Claimant	Support Agency

- Footnotes:
- (1) Major claimants may set C.O. approval limits below those shown on this table.
  - (2) Documentation is required for repair or maintenance projects over \$500,000, minor construction projects over \$200,000, and combination projects over \$300,000.
  - (3) Cost limit is \$1.0M (\$3.0M for MCON) for construction project solely to correct life-, health-, or safety-threatening deficiency.
  - (4) CPP: Capital Purchases Program.
  - (5) Support Agency is the major claimant or agency funding the procurement of the equipment. Equipment installation is funded by the Support Agency if also funding the procurement of the equipment.
  - (6) Equipment installation in new construction and additions is funded as construction.
  - (7) Equipment installation project costs do not include the cost of the equipment and are funded with the same funds source used to procure the equipment.
  - (8) Documentation is required for equipment installation projects over \$200,000.

TABLE 3  
Reserve Activities (O&MNR, Procurement)

Category of Work	Cost Limits	Approval Request		Approval Authority	Funds Sources
		To	Via		
1. Maintenance					
(a) Recurring	None	None		C.O.	Activity
(b) Specific	\$0 - \$75,000	None		C.O.	Activity
(footnote 1 & 2)	Over \$75,000	Major Claimant		Major Claimant	Major Claimant
2. Repair					
(a) General	\$0 - \$75,000	None		C.O.	Activity
(footnote 1 & 2)	\$75K to \$5M	Major Claimant		Major Claimant	Major Claimant
	Over \$5M	CNO(N44D)	Major Claimant	ASN (I&E)	Major Claimant
(b) Over 50% of plant value	Over \$500K	Major Claimant		Major Claimant	Major Claimant
3. Construction	\$0 - \$25,000	None		C.O.	Activity
(footnotes 2 & 3)	\$25K to \$300K	Major Claimant		Major Claimant	Major Claimant
	(footnote 4)				
Minor MCNR	\$0 to \$400K	CNO	(a) EFD (b) Major Claimant (c) NAVFAC	CNO	CNO - MCNR
Major MCNR	Over \$400K	CNO	(a) EFD (b) Major Claimant (c) NAVFAC	Congress	CNO - MCNR
4. Equipment Installation	\$0 to \$200K	None		C.O.	Activity
(footnotes 2, 5, 6, & 7)	Over \$200K	Major Claimant		Major Claimant	Major Claimant or Support Agency

Footnote: (1) C.O. approval limits set by COMNAVRESFOR for specific maintenance and repair at surface activities is \$25,000.

(2) Documentation is required for repair or maintenance projects over \$75,000, minor construction projects over \$25,000, and combination projects over \$300,000.

(3) C.O. approval limits set by COMNAVRESFOR for minor construction at surface activities is \$15,000.

(4) Cost limit is \$1.0M for construction project solely to correct life-, health-, or safety-threatening deficiency.

(5) Support Agency is the major claimant or agency funding the procurement of the equipment. Equipment installation is funded by the Support Agency if also funding the procurement of the equipment.

(6) Equipment installation in new construction and additions is funded as construction.

(7) Equipment installation project costs do not include the cost of the equipment and are funded with the same funds source used to procure the equipment.



## **APPENDIX C**

### **FORMS**

- EXHIBIT 1: DD 1391
- EXHIBIT 2: DD 1391c
- EXHIBIT 3: Facilities Projects Documentation  
Preparation
- EXHIBIT 4: Cost Estimating Form

## EXHIBIT 1

SAMPLE

Form DD 1391

SAMPLE

1. COMPONENT NAVY	FY 19 <u>95</u> MILITARY CONSTRUCTION PROJECT DATA			2. DATE 2/12/95
3. INSTALLATION AND LOCATION NAVAL STATION SAN DIEGO, CA		4. PROJECT TITLE REPAIR WHARF 1312		
5. PROGRAM ELEMENT O&MN	6. CATEGORY CODE 152-20	7. PROJECT NUMBER RC24-95	8. PROJECT COST (\$000) \$3,089	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT COST	COST (\$000)
REPAIR/CONSTRUCT WHARF .....	LF	1,060	2,000	2,120
Structure .....	LF	1,060	1,794.81	(1,903)
Excavation .....	CY	5,000	43.50	(217)
SUPPORTING FACILITIES .....	LS	--	--	740
Utilities .....	LS	--	--	(145)
Paving, Site Improvement and Demolition .....	LS	--	--	(595)
SUBTOTAL .....	--	--	--	2,860
CONTINGENCY (included) .....	--	--	--	--
CONTRACT ADMINISTRATION (8%) .....	--	--	--	229
TOTAL FUNDED COST .....	--	--	--	3,089
Total Repair .....	--	--	--	(2,853)
Total Construction .....	--	--	--	(236)
TOTAL REQUEST .....	--	--	--	3,089
PLANNING AND DESIGN COST (___%) .....	--	--	--	309
EQUIPMENT FROM OTHER APPROPRIATIONS .....	--	--	NON-ADD	(0)
10. DESCRIPTION OF PROPOSED CONSTRUCTION The repairs are required to correct deterioration due to age and exposure to saltwater. The steel sheet pile bulkhead is severely corroded and rusted through. Fill material behind the bulkhead has filtered through the holes causing subsidence of the pavement surface. The project proposes installation of a new sheet pile bulkhead (capped with concrete) outboard of the existing bulkhead and filling the space between with new fill material. The construction portion of the project is for extending the wharf 80 feet.				
11. REQUIREMENT: <u>1,945</u> LF ADEQUATE: <u>885</u> LF SUBSTANDARD: <u>980</u> LF PROJECT The project will repair/replace the bulkhead and pavement ..... REQUIREMENT: The facility is needed for the berthing of ships ..... The mission of the station is .....				

(CONTINUED ON DD 1391c)

## EXHIBIT 2

**SAMPLE**

Form DD 1391c

**SAMPLE**

1. COMPONENT NAVY	FY 19 <u>95</u> MILITARY CONSTRUCTION PROJECT DATA	2. DATE 2/12/95
3. INSTALLATION AND LOCATION NAVAL STATION SAN DIEGO, CA		

4. PROGRAM ELEMENT	5. PROJECT NUMBER RC24-95
--------------------	------------------------------

## 11. REQUIREMENT: (CONTINUED)

CURRENT SITUATION :

An adequate facility does not exist to support .....

AIS data.....

BASEREP data.....

Date facility constructed: 1945.

The photographs show the areas where the bulkhead has deteriorated .....

IMPACT IF NOT PROVIDED :

The wharf will continue to deteriorate due to .....

The mission will be impaired due to .....

ADDITIONAL DATA : (complete the following items, or indicate if "Not Applicable")

A. Facility Number: 1312

B. Property Record Number: 2-05349

C. Facility Replacement Cost: \$60.0 Million (PRV) ( indicate if PRV or CPV)

D. Hazardous Material Information

E. Economic Analysis: (See attached)

## Economic Alternatives Considered:

- (1) Status Quo: This is not a viable alternative.....
- (2) Repair/Modernization: This viable alternative would .....
- (3) Lease: There is no privately owned, commercial, .....
- (4) New Construction: This alternative will construct .....

F. Phasing:

	Design	Repair	Constr.	Total	
	Cost	Cost	Cost	Funded	
Phase	Cost	Cost	Cost	Cost	FY
I	\$194K	\$1,700K	\$236K	\$1,936K	95
II	\$ 115K	\$ 1,153K	----	\$ 1,153K	96
Totals:	\$309K	\$2,853K	\$236K	\$3,089K	

G. Other Proposed Projects: MILCON P-234 for upgrading the utilities...

H. Status of Design: X 35%    50%    100%    Final    Other            (Explain)  
(CONTINUED ON DD 1391c)

## EXHIBIT 2

**SAMPLE**

Form DD 1391c (Cont'd.)

**SAMPLE**

1. COMPONENT NAVY	FY 19 <u>95</u> MILITARY CONSTRUCTION PROJECT DATA	2. DATE 2/12/95
3. INSTALLATION AND LOCATION NAVAL STATION SAN DIEGO, CA		
4. PROGRAM ELEMENT		5. PROJECT NUMBER RC24-95
11. REQUIREMENT: (CONTINUED) ATTACHMENTS : A. Site plan and vicinity map. B. Site waivers (e.g.: explosive, airfield, etc.). C. Engineering cost estimate. D. Economic analysis. E. Photographs.		

12. SIGNATURES:

\_\_\_\_\_  
Responsible Official at Activity

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date  
(CONTINUED ON DD 1391c)

## EXHIBIT 3

## Facilities Projects Documentation Preparation

1. General Information

Facilities projects documentation must be provided on DD 1391. Additional data may be continued on DD 1391c. The DD 1391 replaces the Step II format. The forms are prepared using the procedures outlined in chapter 2. The format is intended to enable the preparing official to systematically provide all important data required for design and/or proper review and validation of the project. It is important that all data be factual and complete so that all projects may be judged on the same basis and receive equitable consideration in approval decisions. Reviewing authorities are directed to return documentation to the station for revision or cancellation, as appropriate, projects that will not withstand close scrutiny. Major claimants may specify that activities submit additional information.

2. Directions

DD 1391/1391c, Blocks 1 through 12, should be completed in the following manner (Exhibits 1 and 2 provide examples of DD 1391/1391c):

Block 1. COMPONENT. Enter Navy. FISCAL YEAR. Enter fiscal year assumed in estimate for project execution.

Block 2. DATE. Enter date project was prepared or date project was revised.

Block 3. INSTALLATION AND LOCATION. Enter activity name and location. Avoid abbreviations.

Block 4. PROJECT TITLE. Provide descriptive title of project. Wording should indicate clearly and briefly the type of project and function of the involved facility. Include building or structure number in the title. See paragraphs [2.2.3](#) and [2.2.4](#) for more information.

Block 5. PROGRAM ELEMENT. Enter type of funds to be used for the project, e.g.: O&MN, RDT&E or DBOF, etc.

Block 6. CATEGORY CODE. Enter the five digit facility category code from NAVFAC P-72. If a facility is a multi-use facility, use the category code as found on the property record card or the category code with the predominant space usage of the facility. Use the new category code for a project to convert an existing facility or construct a new facility.

Block 7. PROJECT NUMBER. Enter the project number as explained in paragraph 2.2.3.

Block 8. PROJECT COST. Enter the estimated project cost (funded cost).

Do not include planning and design cost as part of the project cost unless it is going to be funded under a "design-build" contract. Show the planning and design costs on the cost estimate form.

Block 9. COST ESTIMATES. Enter a summary of the project cost estimate in this block including cost of all phases of work. Contingency is addressed in this block if not included in estimate line items. Show the supervision, inspection, and overhead (SIOH) or contract administration cost in this block. Include planning and design cost in this block. The acquisition of equipment (personal property), funded from appropriations for procurement or the capital purchases program, may be shown at the bottom of this block as a non-additive ("NON-ADD") item (i.e.: listed as a lump sum with a cost figure in parenthesis). See paragraph 2.2.9 of this manual for additional information.

a. Column entitled ITEM

(1) List the primary facility, main building, or structure being repaired or constructed. Estimate includes the cost of fixed (built-in) equipment normally provided as part of the facility (e.g.: air conditioning, heating, electrical, etc.).

(2) List the supporting facilities items of construction directly related to and required for the support of the primary facility (e.g.: special foundations, electrical utilities, roads, parking, site improvements, and demolition).

(3) List the subtotal item.

(4) List contingency if not included in the detailed estimate line items, and contract administration.

(5) List the total funded cost item.

(6) List the breakdown of items of funded cost for each work classification for combination projects (repair, construction, equipment installation, etc.).

(7) List the total request item.

(8) List the planning and design cost item.

(9) List the equipment from other appropriations item.

b. Column entitled U/M

Enter the unit of measure shown in NAVFAC P-72 for each listed item. Lump Sum (LS) may be used when there is no specific unit of measure available.

c. Column entitled QUANTITY

Enter the quantity for each item. Lump sum items are shown with a dash.



d. Column entitled UNIT COST

Enter the unit cost in dollars and cents for each item. Lump sum items are shown with a dash.

e. Column entitled COST (\$000)

Enter the product of the quantity and unit cost columns rounded to thousands of dollars.

(1) Enter the cost of the primary facility without parenthesis.

Components of the primary facility should be entered in parenthesis.

(2) Enter the cost of supporting facilities without parenthesis.

Components of the supporting facilities should be entered in parenthesis.

(3) Enter the subtotal cost. The subtotal is the sum of primary facilities and supporting facilities costs (sum of numbers not in parenthesis).

(4) Enter the contingency if not included in the detailed estimate line items, and contract administration costs. See paragraph **2.2.9**.

(5) Enter the total funded cost. The total funded cost includes the funded cost of all phases of work.

(6) Enter the funded cost for each work classification. Include the costs of all phases for each category of work.

(7) Enter the total request. This cost is the same as total funded cost.

(8) Enter the planning and design cost. This cost will be a funded cost under "design-build" contracts.

(9) Cost of equipment provided from other appropriations should be included in parenthesis.

(10) The total project cost, shown in Block 8, should be the same as total funded cost on the accompanying detailed cost estimate, NAVFAC 11013/7.

Block 10. DESCRIPTION OF PROPOSED CONSTRUCTION. Provide a brief description of the facility condition and proposed work. Indicate the type of construction materials and built-in equipment to be replaced in existing facilities. For projects involving additions, alterations, or conversions, describe the changes to be made.

Block 11. REQUIREMENT. Indicate how much, using the unit of measure, is the "Requirement", and "Adequate" and "Substandard" conditions. This information may be found on the Facility Requirements Plan (FRP).

Generally, real property facilities projects that are not required to

satisfy the approved FRP should not be supported. Additional information may be continued in DD 1391c.

- a. Project. Provide a brief statement on what the project does.
  - b. Requirement. Provide the facts as to why the facility is essential to meet current and/or future operations.
  - c. Current Situation. Describe the current situation and how the requirement is presently met. Provide the year when the facility was originally completed and type of construction. If the existing facility is deteriorated or outdated, provide specific information that reflect those conditions, including appropriate critical backlog and Shore Base Readiness Report (BASEREP) facility condition ratings. If appropriate, provide photographs and small scale drawings.
  - d. Impact If Not Provided. Describe the impact, citing the extent and manner of adverse impact on mission accomplishment if the project is not accomplished.
  - e. Additional Data
    - (1) Facility Replacement Cost or CPV from the "Detailed Inventory of Naval Shore Facilities", NAVFAC P-164. If the CPV does not appear reasonable as an estimate of the replacement cost, provide justification and cost estimate for replacing the facility. Indicate if the facility components will be increased in size and capacity, and the increase in cost.
    - (2) Hazardous Material. Specify the amount, location and cost for asbestos, lead paint and any other hazardous material removal and disposal.
    - (3) If required, a summary of the options considered in the economic analysis should be listed. Follow guidance in NAVFAC P-442 for preparing the economic analysis.
    - (4) Phasing of a repair project should include the cost of each phase and the fiscal year planned for funding.
    - (5) Describe any accomplished or proposed military construction or NAF construction, repair and equipment installation project for the facility within the past 24 months and those planned in the next 12 months.
  - f. Place an X in appropriate design status block.
  - g. Attachments. List attachments and supporting documentation.
- Block 12. SIGNATURES. The commanding officer, staff civil engineer, or public works officer should sign this document as the responsible official. The document should provide the date of signature.

EXHIBIT 4  
Cost Estimating Form

**SAMPLE****SAMPLE**

NAVFAC 11013/7 (1-78)		COST ESTIMATE				DATE: 2/12/95		SHEET 1 OF 2	
ACTIVITY AND LOCATION NAVAL STATION San Diego, CA				CONSTRUCTION CONTRACT				ID NO RC24-95	
				ESTIMATED BY W. Smith				CAT CODE 152-20	
PROJECT TITLE Special Project RC24-95, Repair Wharf # 1312									
				STATUS DESIGN ___ PED <u>X</u> 35% ___ 100% ___ FINAL ___ Other ___				JOB ORDER	
ITEM DESCRIPTION		QUANTITY		MATERIAL COST		LABOR COST		ENGR ESTIMATE	
	TOTAL QTY	U/M	UNIT COST	COST	UNIT COST	COST	UNIT COST	TOTAL COST	
REPAIR WORK:									
Demolition	--	LS	--	--	--	--	--	194,000	
Sheetpiles	980	LF	1,000	980,000	420	411,600	--	1,391,600	
Excavation	4,620	CY	2.50	11,550	10.50	48,510	--	60,060	
Backfill	4,620	CY	5.50	25,410	25.00	115,500	--	140,910	
Tie Rods	1,386	LF	114.10	158,143	30.67	42,508	--	200,651	
Paving/Site Improve.	--	LS	--	--	--	--	--	355,000	
Epoxy Coating	1.00	EA	73,245	73,245	93,200	93,200	--	166,445	
Utilities	--	LS	--	--	--	--	--	133,032	
Subtotal								2,641,698	
Contract Administration (8%)								211,336	
Total Repair								2,853,034	
CONSTRUCTION WORK:									
Demolition	--	LS	--	--	--	16,000	--	16,000	
Sheetpiles	80	LF	1,000	80,000	420	33,600	--	113,600	

Excavation/Backfill	380	CY	8.00	3,040	35.50	13,490	--	16,530
Tie Rods	114	LF	114.10	13,008	30.67	3,496	--	16,504
Paving	--	LS	--	--	--	--	--	30,000
(Cont'd. next page)								

**SAMPLE**

EXHIBIT 4  
Cost Estimating Form (Cont'd)

**SAMPLE****SAMPLE**

NAVFAC 11013/7 (1-78)		COST ESTIMATE				DATE: 2/12/95		SHEET 2 OF 2	
ACTIVITY AND LOCATION NAVAL STATION San Diego, CA				CONSTRUCTION CONTRACT				ID NO RC24-95	
				ESTIMATED BY W. Smith				CAT CODE 152-20	
PROJECT TITLE Special Project RC24-95, Repair Wharf # 1312									
				STATUS DESIGN ___ PED <u>X</u> 35% ___ 100% ___ FINAL ___ Other ___				JOB ORDER	
ITEM DESCRIPTION		QUANTITY		MATERIAL COST		LABOR COST		ENGR ESTIMATE	
	TOTAL QTY	U/M	UNIT COST	COST	UNIT COST	COST	UNIT COST	TOTAL COST	
CONSTRUCTION WORK: (Cont'd)									
Cathodic Protection	--	LS	--	--	--	--	--	11,968	
Epoxy Coating	1.00	EA	6,000	6,000	7,700	7,700	--	13,700	
Subtotal								218,302	
Contract									
Administration (8%)								17,464	
Total Construction								235,766	
Contingency								(included)	
Gov't. Furnished Material								(none)	
Total Funded Cost								3,088,800	
Total Request								3,089,000	
Planning & Design (___%)								(308,900)	


**SAMPLE**

## INDEX

## A

Activity responsibility;  
    repair projects, **2.3.4a**;

Addition;  
    construction, **6.1.1a**  
    definition of, **6.1.1c**  
    incrementation, **6.2.1**;  
    repair and, **3.1.1**;  
    titles, **2.2.4b**;

Air Conditioning;  
    identification numbers,  
        **2.2.3d**;

Alterations;  
    definition, **6.1.1e**  
    project identification,  
        **2.2.3**;  
    repair and, **3.1.1b**,  
        **3.1.2c**;  
    self-help, **2.4.3c**;  
    titles, **2.2.4b**;

Ancillary Equipment, **5.1.2, 5.1.3**

Antennas and Antenna Systems;  
    maintenance funding,  
        **4.2.3a**;  
    service access roads,  
        **4.2.3b**.

Annual Inspection Summary;  
    (see OPNAVI NST 11010.34B)  
    project number, **2.2.3a**,  
        **2.2.6**;

Assistant Secretary of the Navy;  
    approvals, **2.3.6, chapter 6**  
        (part 4), **7.2.3**,  
    appendix **B**;

B

BASEREP, **2.2.3.a, 2.2.6;**

C

Cathodic Protection, **3.1.3j,**

**6.1.1a;**

Chief of Naval Operations, Repair

Project Approval, **2.3.6;**

Combination Projects;

construction, **6.2.1g;**

cost estimate, **2.2.9;**

equipment installation,

**5.1.3;**

funding, **2.4.3;**

identification number,

**2.2.3;**

mix funds, **6.2.2;**

titles, **2.2.4c;**

validation, **2.3.4b(4),**

appendix B;

Construction Projects;

approval, **2.1.2, chapter 6**

(part 4), appendix B;

combination, **2.2.1d,**

**2.2.4c, 2.2.9, 6.2.1g;**

classified as repair,

**3.1.1, 3.1.2;**

Contingency Authority,

**6.4.5;**

definition, **6.1.1a,**

**6.1.1g;**

demolition, **6.1.1d;**

documentation, **2.2.1;**

Emergency, **6.4.2;**

Exceptional, **6.1.1g;**

funded cost, **2.1.1e;**



funding, **2.1.3, chapter 6**  
     **(part 4);**  
 identification number,  
     **2.2.3;**  
 incrementation, **6.2.1;**  
 installation of personal  
     property, **5.1.3, 5.2.1;**  
 GSA-administered buildings,  
     **6.3.1;**  
 non-capitalized, **6.1.1a;**  
 phasing, **2.2.3g, 2.2.9b,**  
     **2.4.3b;**  
 programming, **chapter 6**  
     **(part 4);**  
 prohibited actions,  
     **6.2.1f;**  
 review, **2.3.4, 6.4.4c;**  
 submission, **chapter 6**  
     **(part 4);**  
 titles, **2.2.4;**  
 unfunded cost, **2.1.1f**  
 Unspecified Minor  
     Construction, **6.1.1f(2),**  
     **6.4.4;**  
 work classification,  
     **2.1.5c;**  
 Conversion;  
     definition, **6.1.1b;**  
     installation of personal  
         property, **5.1.3;**  
 Cost Estimates, **2.2.9;**  
     CNO approval, **2.3.6;**  
     equipment installation,  
         **5.1.3c(2);**  
     economic analysis, **2.2.8b**

form, appendix C (Exhibit-  
4);  
review, **2.3.4c**;  
Current Plant Value, **2.1.1g**,  
appendix C (Exhibit -2);  
approval repairs over 50  
percent appendix B;

D

Damaged Facilities, Major  
Restoration of,  
**3.2.1** and **6.4.3**;  
Defense Business Operations Fund  
(DBOF);  
approval authority, **2.2.1**,  
**3.2.4**, **4.2.5**, **6.4.6**,  
appendix B (Table 2);  
definition, **2.1.1d**;  
documentation, **2.2.1**;  
funds, **2.1.3**;  
maintenance, **4.2.1a**;  
programming, **2.3.3**;  
repair, **3.2.1**;  
validation, **2.3.4**;  
Depreciation, **2.1.1f(2)**;  
Demolition;  
construction, **6.1.1a**,  
**6.1.1d**;  
repair, **3.1.2f**.  
Design; unfunded cost, **2.1.1f(4)**  
Directives, DoD, appendix A;  
Dredging, Maintenance, **4.1.3a(4)**

E

Earthquake, **2.3.4a**, **3.1.1a(1)**;  
Economic Analysis, **2.2.8**,  
**2.3.4c(6)**, (see DODINST

7041.3), appendix C  
Exhibit-2);  
EFD review, **2.3.4**;  
Emergency Construction, **6.4.2**  
Environmental, **2.2.6**, **2.3.2**,  
**2.3.4c(8)**, **3.1.1a**,  
**3.1.2f**, **6.4.2a**, (see  
OPNAVINST 5090.1B);  
Equipment Installation, **chapter 5**;  
approval, **2.1.2**, **5.2.2**,  
appendix B;  
combination projects,  
**2.2.9a**, **2.4.3**;  
documentation, **2.2.1**;  
exclusions, **1.3b**;  
expense, **5.1.3c**, **5.2.1**;  
funding, **5.1.3b**, **5.2.1**,  
**6.1.1i**;  
installed equipment,  
**6.1.1h(2)**;  
minor construction, **5.1.1**,  
**5.1.3b**, **5.2.1**;  
personal property, **5.1.2**,  
**5.1.3c**, **6.1.1h(2)**;  
procurement and  
installation, **5.1.3**,  
**5.2.1**, **5.2.2b**, **5.3.1**;  
other than new, **5.1.3c**;  
review/validation, **2.3.4**;  
submission, **2.3.1**, **5.2.3**;  
titles, **2.2.4**;  
turn-key, **5.2.1**;  
unfunded cost, **2.1.1f**;  
work classification, **2.1.5**;  
Expansion,

- definition, **6.1.1c**;
- exclusion from repair,
  - 3.1.1b;
- personal property
  - installation, 5.1.3;
- storage facilities, 7.1.1a;
- Expense, 5.1.3c;
- Extension,
  - definition, 6.1.1c;
  - exclusion from repair,
    - 3.1.2e;
  - incrementation, 6.2.1e;
  - personal property
    - installation, 5.1.3;
- F
- Family Housing;
  - exclusion, 1.3b;
- Fire Alarm System, 6.1.1h;
- Fire Protection, 3.1.1a;
- Forms, 2.2.2, appendix C;
- Funded Costs, 2.1.1e;
  - relocatable facilities,
    - 7.1.3;
- Funding of Projects, 2.1.6, 2.3.2,
  - 2.3.4d, 2.3.5c, 7.2.2;
  - combination, 2.4.3a;
  - leased facilities, 6.3.1;
  - maintenance, 4.2.2d,
    - 4.2.3c;
- MILCON Program, chapter 6
  - (part 4);

repair, 3.2.1, 3.2.2a;  
telephone, 5.3.1b(2);

G

Government Owned Equipment,  
2.1.1e(6), 2.1.1f(2);  
GSA-administered buildings, 6.3.1;  
Go Wildcats, 10.2.8;

H

Historic or Cultural Properties,  
3.1.4;

I

Improvement, 2.1.4b, 6.1.1a,  
6.2.1, 6.2.3;  
Incrementation,  
construction, 6.2.1;  
mix funding, 6.2.2;  
multiple projects, 6.2.3;  
repair, 3.2.3;  
Installed Equipment, 6.1.1h;  
Instructions, appendix A,  
International Balance of Payments,  
construction, 7.2.4;  
DoD Instruction 7060.2,  
appendix A;  
evaluation, 2.2.9c;  
Investment, 5.1.3c(2);

L

Labor,  
cost estimating, 2.2.9;  
funded project cost,  
2.1.1e;  
unfunded project cost,  
2.1.1f;

Land,  
classification, 2.1.4;  
exclusion, 1.3b(4);  
funded project cost,

2.1.1e(4);  
MILCON, 6.4.1;  
Laws, restrictions, 1.2;

M

Maintenance,  
    antennas, 4.2.3;  
    approval, 2.1.2, 4.2.5,  
    appendix B;

Maintenance,  
    classification of work,  
    2.1.5a;  
    definition of, 4.1.1, 4.1.2;  
    funding, 4.2 .1, 4.2.2;  
    policy, 1.2;  
    recurring, 4.1.3b, 4.2.1;  
    specific, 4.1.3a, 4.2.1,  
    4.2.2;  
    submission, 4.2.7;  
    telephone, 5.3.1a(3);  
    types of, 4.1.3;

Major Claimant,  
    approval, 2.1.2, 2.3.5d,  
    3.2.4, 4.2.2d, 5.2.2;  
    construction, 6.4.3;  
    execution, 2.4.1, 2.4.2;  
    responsibility, 2.3.3,  
    2.3.5;  
    review, 2.3.4;  
    storage facilities, 7.1.1;

Material,  
    asbestos, 3.1.1a(3);  
    funded project cost,  
    2.1.1e(2);  
    international balance of  
    payments, 7.2.4b;  
    repair, 3.1.1a;  
    unfunded project costs,

- 2.1.1f(3);
- Military Construction,
  - authorization acts, 6.4.1;
  - concurrent work,
    - 6.2.1f(3);
  - emergency construction,
    - 6.4.2;
  - funding, 3.2.1, 4.2.2c,
    - chapter 6 (part 4);
  - GSA facilities, 6.3.1;
  - incrementation, 6.2.1;
  - installed equipment,
    - 6.1.1h;
  - major restoration, 6.4.3;
  - morale, welfare and
    - recreation facilities,
      - 7.2.1;
  - preceding or following
    - projects, 6.2.1b;
- Military Personnel, labor cost,
  - 2.1.1f(1);
- Minor construction;
  - authority for projects,
    - 2.1.2;
  - combination projects,
    - 2.4.3;
  - definition, 6.1.1f;
  - funded project costs,
    - 2.1.1e;
  - funding, 6.4.4b, 6.4.6b;
  - incrementation, 6.2.1;
  - installed equipment,
    - 6.1.1h;
  - same facility, 6.2.3;
  - title, 2.2.4;
  - unfunded project costs,
    - 2.1.1f;

unspecified, 6.1.1g(2),  
 6.4.4;  
 Mixing of Funds, 2.3.6d, 6.2.2,  
 7.2.1a;  
 Modernization, 6.1.1c;  
 N  
 Naval Occupational Safety and Health  
 (NAVOSH), (see OPNAVINST  
 5100.23B);  
 Naval Reserve Activities,  
 approval authority for  
 projects, appendix B  
 (Table 3);  
 Non-appropriated Funds,  
 approval, 7.2.3;  
 combined with appropriated  
 funds, 6.2.2, 7.2.1a;  
 International Balance of  
 Payments projects, 7.2.4  
 funding, 7.2.2;  
 policy, 7.2.1;  
 submission of projects,  
 7.2.3;  
 O  
 OMSI, 2.1.1.f(4);  
 Operations and Maintenance Funds,  
 authority, 2.1.2;  
 equipment installation,  
 5.1.3c(2);  
 funding of minor  
 construction, 6.4.6;  
 GSA facilities, 6.3.1;  
 repair 3.2.1;  
 restoration of damaged  
 facilities, 6.4.3a;  
 Overhead Costs,  
 funded project cost,



2.1.1e(5);  
cost estimate, 2.2.9;  
P

Pavement,  
condition index (PCI) ,  
3.1.2h;  
example of repair, 3.1.3;  
specific maintenance,  
4.1.3;

Personal Property,  
ancillary equipment,  
5.1.3a;  
approval, 5.2.2;  
definition, 5.1.2;  
equipment installation,  
5.1.1, 5.1.3  
investment, 5.1.3c;  
non-real property costs,  
6.1.1h(2);  
procurement, 5.1.3;  
protective shelters, 7.1.2;  
relocatable facilities,  
7.1.3;  
support agency, appendix B;  
telephone, 5.3.1;  
unfunded cost, 2.1.1f(6);

Phasing,  
projects, 2.2.3g, 2.2.9b,  
2.4.3b, appendix C  
(Exhibit-1);  
repair, 3.2.2a, 3.2. 3;

Photographs, 2.2.10, appendix C  
(Exhibit-2);

Planning,  
construction, 6.4.1a, (see  
DODDIR 4270.36);  
cost estimate, 2.2.9;

historic facilities,

3.1.4;

project execution, 2.3.3;

review, 2.3.4c(7);

unfunded cost, 2.1.1f(4);

Procurement,

ancillary equipment,

5.1.3a;

equipment installation,

5.1.3b;

exclusion, 1.3b;

investment, 5.1.3c;

new construction, 5.1.3b;

personal property,

2.1.1f(6), 5.1.2,

6.1.1h(2);

protective shelters, 7.1.2;

relocatable facilities,

7.1.3;

Production,

modernization, 6.1.1c;

personal property, 5.1.2;

protective shelters, 7.1.2;

non-real property,

6.1.1h(2);

Projects (general),

approval, 2.1.2;

construction, chapter 6;

cost estimates, 2.2.9;

definition, 2.1.1a;

equipment installation,

chapter 5;

exclusion, 1.3;

funded cost, 2.1.1e;

incrementation, 6.2.1;

identification number,

2.2.3;

- justification, 2.2.6;
- maintenance, chapter 4;
- non-appropriated projects,  
chapter 7 (part 2);
- policy, 1.1;
- repair, chapter 3;
- restricted, 7.1.1;
- review, 2.3.4;
- submission, chapter 2  
(part 3);
- thresholds, 2.1.2,  
appendix B;
- titles, 2.2.4;
- unfunded costs, 2.1.1f;

## R

- Real Estate, exclusion, 1.3b(4),  
6.4.1a;

- Real Property Facility,  
classification, 2.1.4b;  
construction and  
acquisition, 6.1.1a,  
6.2.1a, 6.4.1a;
- definition, 2.1.1i;
- demolition, 3.1.2f,  
6.1.1a and d;
- equipment installation,  
5.1.1, 5.1.2;
- grouping of, 6.2.1a,
- installed equipment,  
6.1.1h(1);
- maintenance, 4.1.1;
- relocatable facilities,  
7.1.3;
- replacement, 4.2.2c,  
6.1.1d;
- scope, 2.2.5;

- Recreational Facilities, (see

SECNAVINST 7000.23A and  
 MILHDBK 1190);  
 non-appropriated funding,  
 7.2.1;  
 Relocatable Facilities, (see  
 OPNAVINST 11010.33B),  
 7.1.3;  
 Repair,  
     approval authority,  
         2.1.2,  
         3.2.4, appendix B;  
     definition of, 3.1.1;  
     economic analysis, 2.2.8;  
     fire protection, 3.1.1a;  
     funding, 3.2.1;  
     incrementation, 3.2.3;  
     policy, 3.1.2;  
     replacement cost, 2.3.5,  
         3.2.1;  
     scope, 2.2.5, 3.2.2;  
     submission, 3.2.5;  
 Replacement,  
     definition of, 6.1.1d;  
     cost, 2.3.5, appendix C  
         (Exhibit-1);  
 Research, Development, Test and Evaluation;  
     approval and funding,  
         appendix B (Table-1),  
         2.1.2;  
     exclusion of certain  
         facilities, 1.3b(3);  
     personal property, 5.1.2;  
 Restricted Projects, 7.1.1.

S

Safety, 3.1.1a;  
 Seabee labor,  
     execution, 2.4.1;

funded costs, 2.1.1e(1);  
 unfunded costs, 2.1.1f(1);  
 Seismic, 3.1.1a;  
 Self-Help, 2.4.1, 2.4.3c;  
 Shelters, Protective, 7.1.2;  
 Shore Base Readiness Report  
     (BASEREP), (see OPNAVINST  
     3501.167B) 2.2.3, 2.2.6;  
 Site Approval, 7.1.1b;  
 Storage Facilities, 7.1.1a;  
 Supervision, Inspection and Overhead (SIOH),  
     definition, 2.1.1c;  
     cost estimate, 2.2.9a  
     format, appendix C  
     (Exhibit-1)  
     funded cost, 2.1.1e(5);  
 Support Agency, appendix B;  
 Supporting Facilities, 6.2.1e,  
     appendix C (Exhibit -1);

T

Telephone, 5.3.1;  
     installed equipment,  
     6.1.1h;  
 Transportation, as funded project,  
     2.1.1e(6);

U

Unfunded Cost, 2.1.1f;  
 Unused Facility, 4.2.2b;  
 Unspecified Minor Construction  
     Project, 6.1.1g,  
     6.4.4;  
 Utility Systems,  
     cathodic protecti on,  
     3.1.3j, 6.1.1a;  
     construction, 5.1.3c(3);  
     projects for, 2.2.5c,  
     6.2.1e, 6.4.4c(9);

repair, 3.1.2f, 3.1.3g,  
6.1.1a;

V

Validation, Special Projects, 2.3.4;  
appendix B;

W

Warehousing Facilities, 7.1.1a;